

DOCUMENT RESUME

ED 035 772

VT 010 296

AUTHOR Peay, Moisselle
 TITLE Personnel Training and Employment Needs of Hospital Food Services in Tennessee.
 PUB DATE Dec 69
 NOTE 112p.
 EDRS PRICE EDRS Price MF-\$0.50 HC-\$5.70
 DESCRIPTORS Clerical Workers, *Educational Needs, *Food Service Occupations, Foods Instruction, *Hospitals, Managerial Occupations, *Manpower Needs, Occupational Home Economics, Supervisors
 IDENTIFIERS *Tennessee

ABSTRACT

Personnel training and employment needs in connection with food service were studied through interviews with hospital administrators and food service managers in 25 selected Tennessee hospitals. Mentioned most often by managers as important were the areas of communications and human relations for all job classifications except food preparation, food service, and food sanitation workers; for these workers, the area of sanitation and personal hygiene was considered more important. Other high ranking areas were: (1) for managerial personnel--management principles, human nutrition and food science, and personnel administration, (2) for supervisory personnel--principles of quantity food preparation and service, use and care of equipment, and sanitary and safety standards, (3) for clerical personnel--general principles of food inventory control, food issue, and stock room operation, basic mathematics, and menu and diet terminology, (4) for food preparation workers--food preparation for special diets, use of standardized recipes, and principles of quantity food preparation and service, (5) for food service workers--food display and service, human relations, and communications, (6) for food sanitation workers--use and care of equipment and safety. Positions considered to be most difficult to fill were those of food preparation and food sanitation workers. This M.S. thesis was submitted to The University of Tennessee. (JK)

ED035772



PERSONNEL TRAINING AND EMPLOYMENT NEEDS OF
HOSPITAL FOOD SERVICES IN TENNESSEE

A Thesis

by

Moiselle Peay

December 1969

The University of Tennessee
Knoxville, Tennessee

VT010293



COLE PRINTING & THESIS SERVICE, INC.

2126 WHITE AVENUE, KNOXVILLE, TENNESSEE 37916

ED035772

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

PERSONNEL TRAINING AND EMPLOYMENT NEEDS OF
HOSPITAL FOOD SERVICES IN TENNESSEE

A Thesis

Presented to

the Graduate Council of

The University of Tennessee

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Moiselle Peay

December 1969

ACKNOWLEDGMENTS

The author is especially grateful to Dr. Mary Jo Hitchcock for her guidance, advice and encouragement throughout this study. Thanks are due also to Dr. Grayce Goertz for her interest and many helpful suggestions, and to Dr. Douglas Towne for his assistance in planning and reporting the project.

Appreciation is expressed to the hospital administrators and food service managers who gave so generously of their time to participate in the survey, and to Mrs. Edna Roselle, who helped with the interviews.

ABSTRACT

Personnel training and employment needs in 25 selected Tennessee hospitals were studied. Information from this pilot research will be used to develop methods and procedures for conducting similar studies of the food service industry in the future.

Following a preliminary survey by mail to identify the sample desired, personal interviews were scheduled with the hospital administrator and the food service manager in each of the selected hospitals.

Six major categories of personnel were studied: (1) managerial, (2) supervisory, (3) clerical, (4) food preparation workers, (5) food service workers, and (6) food sanitation workers. For each category, food service managers indicated their opinion regarding the importance of selected areas of skills and knowledge assumed to be needed by personnel. Training conducted by the hospital and the responsibility for training also was indicated.

Included in the areas of training mentioned as important most often by managers were communications and human relations for all job classifications other than food preparation and sanitation workers. For managerial personnel, management principles, human nutrition and food science, menu planning and personnel administration were considered most important. For supervisory personnel, managers agreed on the importance of principles of quantity food preparation and service, nutrition and diet therapy, sanitary and safety standards and use and care of equipment. For clerical personnel, managers indicated as most

important food inventory control, stock room operation and food storage. Managers stressed the importance of quantity food preparation and service for regular and modified diets, use of standardized recipes, quality food standards, menu terminology and use and care of equipment for food preparation workers; food display and service for food service workers; and for food sanitation workers, safety and use and care of equipment. Sanitation and personal hygiene was considered important for food preparation, food service and food sanitation worker job categories.

Little training for managerial personnel was done by hospitals. A greater number of hospitals reported training for supervisory personnel than for managerial. Training mentioned for clerical workers was limited to those areas directly concerned with food service activities. As the skill and training level decreased, more training programs were reported by hospitals, with widespread training being conducted for food preparation, food service and food sanitation personnel.

Hospitals generally considered training for managerial personnel the responsibility of an agency other than the hospital. For the majority of the remaining areas, managers indicated that training for food service personnel should be shared between the hospital and an outside agency.

Information from the pilot study had implications for further study of food service personnel training programs. Recommendations for procedures in further studies were made.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
II. REVIEW OF LITERATURE	4
Importance of Training	4
Hospital Training for Food Service Personnel	6
Training of Food Service Personnel by Agencies	
Other Than Hospitals	13
Future Personnel Needs of Hospital Food Services	17
Summary	20
III. PROCEDURE	21
Design of the Study	21
The Questionnaire	23
IV. RESULTS AND DISCUSSION	27
Hospital Administrator Responses	27
Food Service Manager Responses	30
Managerial Category	35
Supervisory Category	40
Clerical Category	44
Food Preparation Workers	48
Food Service Workers	51
Food Sanitation Workers	54
V. SUMMARY	58
Skills and Knowledge	60

CHAPTER	PAGE
Training	62
VI. RECOMMENDATIONS FOR FUTURE STUDIES	66
The Questionnaire	66
Survey Procedure	69
LIST OF REFERENCES	71
APPENDIXES	76
Appendix A	77
Appendix B	78
Appendix C	80
Appendix D	93
VITA	102

LIST OF TABLES

TABLE		PAGE
1.	Continuing Education Programs for Food Service	
	Managers	32
2.	Hospital Reaction to Training for Managerial	
	Personnel	37
3.	Hospital Reaction to Training for Supervisory	
	Personnel	41
4.	Hospital Reaction to Training for Clerical Personnel . . .	45
5.	Hospital Reaction to Training for Food Preparation	
	Workers	49
6.	Hospital Reaction to Training for Food Service	
	Workers	53
7.	Hospital Reaction to Training for Food Sanitation	
	Workers	56
8.	Major Problems Relating to Food Service Personnel as	
	Reported by Hospital Administrators	93
9.	Qualifications of Food Service Managers Desired by	
	Hospital Administrators	94
10.	Employee Distribution, Turnover and Replacement	
	Difficulty in Six Job Categories	95
11.	Reaction to Training for Managerial Personnel by	
	Large, Medium and Small Hospitals	96

TABLE

PAGE

12.	Reaction to Training for Supervisory Personnel by	
	Large, Medium and Small Hospitals	97
13.	Reaction to Training for Clerical Personnel by	
	Large, Medium and Small Hospitals	98
14.	Reaction to Training for Food Preparation Workers by	
	Large, Medium and Small Hospitals	99
15.	Reaction to Training for Food Service Workers by	
	Large, Medium and Small Hospitals	100
16.	Reaction to Training for Food Sanitation Workers by	
	Large, Medium and Small Hospitals	101

CHAPTER I

INTRODUCTION

Rising costs have made the food service manager acutely aware of the need for an efficient and productive labor force. American industry has recognized that the degree to which its members are trained determines the efficiency of any organization, and as a result, has spent large sums of money in training employees (Strauss et al., 1967). Food service, however, has not kept pace with other industries in increasing the productivity of employees. Some manufacturing companies have increased the productivity of their employees to approximately 80 percent, whereas investigation has shown about a 43 percent productivity level in food service (Lattin, 1969).

Through the years the food service industry has had difficulty with such problems as high employee turnover rates, low salaries, poor working conditions and the lack of prestige or status generally associated with food service employment (Lundberg et al., 1964). Many of its members have of necessity come from the untrained, unskilled group of workers. Some authorities feel that as much as 80 to 90 percent of the food service work force may be composed of this group (Welch, 1966). In order to be productive workers, these employees must be trained. With proper training, it has been estimated that an approximate 25 percent increase in food service employee efficiency could be demonstrated (Lundberg et al., 1964; Stokes, 1967).

According to Welch (1966) training for the unskilled employee may be given effectively on the job if certain criteria relative to planning, program presentation and follow-up are met. For skilled employees, including food production personnel, study at a vocational or technical school was recommended as a supplement to on-the-job training. For supervisory or management food service personnel who may already be trained and experienced, he encouraged continuing education in order to keep up with the continuous changes and developments occurring in the industry.

Welch (1966) further indicated that any comprehensive education program for the food service field should include several components. These are training for workers at the skill level, practical experience on the job for those with formal education, as well as a plan whereby educational deficiencies could be corrected. Also, an opportunity for continuing education for those already trained should be included.

Training programs conducted purely for training cannot be successful (Berke, 1960). To be effective, they must be directed toward solving organizational problems and achieving organizational objectives (McGehee et al., 1961). Authorities agreed that training programs should be designed to meet recognized needs (Berke, 1960; McGehee, 1961; Newport, 1968) and one of the fundamental requirements in the approach to training program development was to determine training needs (Newport, 1968).

Although changes in the educational system and federal legislation regarding vocational training have encouraged training for food service

employment, there is little definitive information as to the degree to which this training is meeting the needs of the industry or the number of graduates who remain in the food service field.

If data were available relative to the training needs of the industry, and to the types of training programs being conducted within the various food service operations, some basis might be provided whereby educational programs conducted by other agencies could be evaluated and more meaningful ones developed.

The purpose of this study was to identify the present and future training and employment needs of selected hospital food service departments in Tennessee. This research will serve as a pilot study to establish procedures for securing similar data from other food service fields. The total information then may be used as a basis for recommending educational programs for the food service industry on a state-wide basis.

CHAPTER II

REVIEW OF LITERATURE

I. IMPORTANCE OF TRAINING

The importance of training for personnel in hospital food services has been widely recognized. Aside from the obvious advantage of improving the skill and knowledge of the worker and hence, increasing his productivity, proper training also has been shown to have additional advantages.

Pelto et al. (1965) reported that personnel turnover rates were lower in hospitals having formal training and induction programs and that such programs could contribute to stabilizing the work force. Other investigators indicated similar results when training for supervisors and employees was improved (Wallace, 1959; Rockwell, 1960). In a study of labor turnover in 19 hospital food service departments, Harwood (1965) also found that departments having the lowest rates of avoidable turnover were those in which the greatest emphasis was placed on indoctrination, orientation and training programs for personnel.

By lowering turnover, operating costs can be substantially reduced. According to Gray et al. (1965) labor turnover is one of the most expensive problems with which food service administrators must cope. In a study of service kitchen employees, direct costs per separated worker were found to range from \$135.27 to \$165.27 (Gray et al., 1965).

A concrete savings in payroll costs as a result of training was shown in a comparison of 12 commercial cafeterias (Freshwater et al., 1969). Those with formal training programs were able to use employees more effectively in that they were able to perform a number of different jobs. On the average, cafeterias with formal training programs had a 3 percent less payroll ratio to sales than those not conducting formal training programs and the annual payroll savings was approximately 8 percent.

Along with the benefits derived by employers from well trained workers, there are also employee advantages. Training provides an opportunity for increased earnings and for promotion. It also may give the employee a greater feeling of self-respect and security (Stokes, 1967).

Additional emphasis on training programs for dietary personnel has resulted from regulations concerning participation of hospitals in the Federal Health Insurance Program for the Aged. One of the conditions for participation relative to the dietary department states "There is an in-service training program for dietary employees which includes the proper handling of food and personal grooming" (U.S. Dept. of HEW, 1967a).

According to Bennett (1968a), one of the greatest problems relating to the hospital manpower shortage is the absence of training and development programs which are integrated, coordinated and long-range. In dealing with the problem, one of the top priorities should be to strengthen the training and personnel programs of the hospital.

Supplementing this, training and education programs outside the hospital also should be utilized (Bennett, 1968b).

Weimer (1966) pointed out that because of the low national unemployment level and the attractions of the business world for workers, fewer and less qualified applicants will be available for hospitals. He agreed that one of the more practical answers to the problem might be greater emphasis on training programs in order to use existing hospital personnel in the most efficient and effective manner.

II. HOSPITAL TRAINING FOR FOOD SERVICE PERSONNEL

There is little information in the literature regarding the number of hospitals conducting formal training programs for food service employees or specific information concerning subject matter content of such programs.

In a 1963 survey regarding food service management in American Hospital Association member hospitals, 3838 or 53.1 percent of the administrators operating their own food service replied. Only 920 of this number said that they provided in-service training to prepare dietary employees for supervisory positions (Anon. 1964). The survey, which was conducted by the American Dietetic Association and the American Hospital Association, showed a shortage of professional dietitians and emphasized the need for trained food service supervisors, especially in small hospitals where the services of a qualified dietitian may not be available.

A recent study of dietary labor and employment in Iowa hospitals indicated that, while 91 percent of the hospitals reported training, training periods for non-supervisory personnel were short and seldom on a pre-planned schedule (Jolin et al., 1968). This study further showed that 31 percent of the food service managers had participated in no food service training program.

Availability of qualified persons who have the necessary time to develop training materials and programs may be a factor in determining the hospital's educational policies. A Public Health Service research project conducted by the Connecticut Dietetic Association in 1959 showed that less than five of the 34 member general hospitals were conducting training programs for dietary personnel (Hartman, 1961). Reasons given by the dietitians were that they did not have time to prepare training program materials.

According to Moore (1964), the lack of time and shortage of professional staff resulted in few well organized training programs for food service employees. As a possible solution, the use of programmed instruction, which was developed and used successfully at the University of Missouri Medical Center in teaching food sanitation to non-professional personnel was suggested.

The training needs of hospitals differ according to size and to the individual problems of the institution. The small hospital may not be able to secure the services of a qualified dietitian or food service manager and the person in charge of food service may have a limited educational and food service management background.

Such hospitals in Minnesota indicated that their primary training need was in the area of planning modified and regular diet menus (Wolcyn et al., 1962). A statewide training program was conducted during which these topics were taught, along with sessions on proper food handling. Pre- and post-tests showed a considerable degree of improvement by the participants.

Similar training needs in small hospitals were reported by a dietary consultant in Arkansas (Spears, 1961). Along with a lack of supervision, these hospitals had poor menu writing procedures and a major problem existed in planning and serving modified diets. Sanitation, though adequate by home standards, did not meet health department sanitation codes. A 12 week training course was conducted for food service managers with concentration during the first half on menu planning for regular and modified diets and for the second half on improving supervisory practices.

In Iowa, approximately one-half of the hospital food services are managed by food service supervisors or cooks (Jernigan, 1961). For employees of those small hospitals who had not been reached with other types of training, the Iowa State Department of Health developed a home study course. Lessons in the course emphasized menu planning and food preparation for regular and modified diets, as well as a unit on sanitation. This was supplemented by other training programs planned specifically for hospitals without a qualified dietitian. District meetings were held for cooks and food service supervisors, and short courses were conducted annually at Iowa State University for food

service supervisors. To complete the program on a professional level, a workshop for shared dietitians was held with emphasis on new trends in diet therapy.

Large hospitals have a different type of departmental organization and their training programs appear to be planned accordingly. Gehring (1964) reported that the Methodist Hospital in Indianapolis, Indiana, conducted a comprehensive training program for all levels of personnel. The program was planned and directed by a staff dietitian who was responsible for all employee training in the food service department. All employees were given classroom instruction in departmental policies, sanitation, use and care of equipment, portion control, and proper procedures in dish handling and storage. Food handling, personal hygiene, and safety were discussed with all new employees in orientation sessions. Formal instruction for beginning supervisors included nutrition and diet therapy, techniques of supervision and job training and basic information about food management. As supervisors became more advanced, their training was continued through workshops with the addition of such topics as management functions, communications, work simplification, food standards, food preparation methods and induction training. Continuing education for the professional staff was provided through pre-planned monthly staff meetings.

In-service training at a Veterans Administration Hospital was an integrated part of a hospital wide program which was given all new employees and continued through refresher courses on an annual basis (Fisher, 1967). The dietetic section of the program included training

in personal hygiene, bacteriology, tray service, modified diets and safety. Records of courses taught and employees completing them for the entire hospital were kept up to date by electronic data processing.

Stanfield (1959) reported that training at the University of Texas Medical Branch, Galveston, was divided into two areas - training of supervisors in proper teaching methods so that they might train employees and a training program for employees. Employee training consisted of regularly scheduled sessions which included human relations, use and care of equipment, proper tray service, portion control, safety and sanitation, departmental procedures and some basic information on use of time and motion.

The in-service training program for employees at the University of Iowa Hospitals also encompassed all personnel levels (Baden, 1967). In addition to the orientation and specific job training given on employment, a group training program for all employees was conducted regularly. This program was directed by a staff member and included sessions planned to improve the employee's job attitude through encouraging creativity and initiative, to emphasize departmental sanitary and safety routines and to strengthen on-the-job skills taught each employee. Communications also were stressed. Supervisors were given continuous training in methods and techniques of supervision. Professional staff members participated in continuing education programs which included such topics as diet therapy, research, and reports of current information from professional meetings.

Some training programs utilized the cooperative efforts of several groups. Hartman (1965) described a Maryland training program for cooks as "one of the more successful ones" because it had not had a student dropout in five years of operation. The program which was conducted annually through institutes distributed in hospitals across the state provided training in personnel management, human relations, food sanitation and personal hygiene, cleaning, food production and storage, nutrition and modified diets, cost control, proper care of equipment and work simplification.

In the District of Columbia, public school personnel and hospital personnel, in considering the educational needs of dietary department employees in large metropolitan hospitals, agreed that the food service supervisors were the group most in need of training and for which training would have the most benefit (Styer et al., 1963). A training program was developed by the Industrial and Adult Education Department of the public school system under the guidance of a committee of hospital dietitians. Classes, which were held at one of the participating hospitals, included organization and management of food service, basic foods and nutrition courses, sanitation, and use and care of equipment. Because the types of equipment used in different hospitals varied considerably, this section of the curriculum was discontinued. For students who completed the first course, more complete training was offered in the original courses and classes in techniques of supervision, including human relations and work simplification were added.

Because of the limited information found in the literature regarding specific training programs, there is little indication as to whether those reported reflect any general training pattern. Subject matter content appears to be consistent with that reported by Harwood (1968) in a study of indoctrination, orientation and training in relation to labor turnover in ten large and nine small hospitals in the Baltimore-Washington area. Group training sessions in these hospitals most often included classes in food handling and personal hygiene, sanitation and safety, operation and care of equipment, and modified diets.

These programs were primarily concerned with training personnel on a sub-professional level and in continuing education for professional persons. Hospitals also are training professional dietitians in specialized areas following their graduation from a university or college. Dietary internships with emphasis on hospital food service administration and therapeutic dietetics were conducted in 52 hospitals in 1967-68, three others offered an internship coordinated with a Master's Degree program with a selection of emphasis on clinical nutrition, food management or general dietetics and one hospital internship offered emphasis on food service administration alone (Anon. 1968). Still other hospitals are training professional dietitians on a three year work experience basis.

Training within the hospital is only one means of developing qualified food service personnel. Training and education for all levels of food service employees also is conducted by various types of other agencies.

III. TRAINING OF FOOD SERVICE PERSONNEL BY AGENCIES OTHER THAN HOSPITALS

Federal legislation has provided financial assistance for a number of occupational programs for both skilled and unskilled persons (Augspurger, 1965; Mallory, 1966). Among those providing training in the food service field are the Economic Opportunity Act of 1964 which provided for the Job Corps, the Manpower Development Act of 1962, extended in 1965, and the Vocational Education Act of 1963.

The Job Corps is one of the programs directed toward the poverty population and more specifically, toward young men and women (Mallory, 1966; Anon. 1969). Training for positions as cooks, cook's helpers, bakers, meat cutters and waiters or hostesses is offered through many Job Corps Centers, with the more complete programs available in the large urban centers (Anon. 1969). Training is planned to equip the trainee with the skills needed at or beyond the job entry level.

The Manpower Development and Training Act provides for occupational training for persons who are not employed, for persons working at less than their skill capacities and for those whose job skills are no longer used (Mallory, 1966; U.S. Dept. of HEW, 1965). Occupational training under this Act may be conducted in the classroom, as on-the-job training or as a combination of the two (U.S. Dept. of HEW, 1965). Food service occupations for which training is given under this Act have included numerous job titles. In 1963, they included general cooks, pantrymen, cook's helpers, short order cooks, fry cooks, and

food service workers (Anon. 1963). In 1965, the titles of assistant kitchen manager, cafeteria manager, waitress, cook apprentice and kitchen helper were listed, as well as cook and food service worker (Mallory, 1966). Over 50 percent of the 4,700 food service trainees under the Manpower Development and Training Act in 1967 were being trained as cooks or apprentice cooks with additional Manpower and Training Act funding being used for training food service supervisors, short order cooks and cook's helpers (Moss, 1969). For trainees needing the basic educational skills in order to effectively use occupational training, subjects such as basic english, mathematics, writing and language skills may be taught under both the Job Corps and the Manpower Development programs (U.S. Dept. of HEW, 1965; Anon. 1969).

The Vocational Education Act of 1963 broadened the scope of vocational education through improving and extending educational programs. It emphasized preparation for "gainful employment" as opposed to the former term "useful employment" (Mallory, 1966). The 1963 legislation was directed toward a program which would meet the needs of people and it provided for vocational training to be conducted in schools and educational institutions of all types for any job for which a need is indicated by the changing world of work (Augsburger, 1965; Mallory, 1966). Only professional jobs or those which require a baccalaureate degree were excluded (Mallory, 1966).

The areas of vocational education under which training for the food service industry may be provided are distributive education, the trade and industrial areas, and the home economics section (Mallory,

1966). In 1967 almost 100 high schools were offering such programs (Meek, 1967). Moss (1969) reported that vocational education programs, both in high school and adult courses, had 30,718 persons enrolled in their trade and industry food service occupational area in 1967, with the majority of the training being for cooks and chefs. In the home economics occupational area, 21,363 students were enrolled in courses which included training for school lunch program directors, cafeteria or lunch room managers and caterers (Moss, 1969).

Junior and Community Colleges also are providing training for supervisory personnel in the food service industry. These colleges, which offer a two year program beyond the secondary school level, represent a part of the educational system which is growing rapidly. Two general types of courses are offered by most of them (Welch, 1966). One is the vocational course designed to provide the technical skills and knowledge which may be directly applied to job performance. The second is the course which prepares the student for further college or university study. Eighty five of these colleges reported a total of 6,900 students having a major in food management in 1967 (Moss, 1969).

Other training courses for food service supervisors are being offered by Michigan State and Pennsylvania State Universities on a slightly different basis (Hartman, 1964; Anon. 1964; Anon. 1965). The program at Michigan State involves a ten week residency, plus six months work experience for the student, whereas the program at Pennsylvania State is taught as a correspondence course.

Professional training for food service is provided by four-year colleges and universities, with graduate work becoming increasingly important as the profession grows in complexity. In 1965-66, 660 students graduated from colleges or universities with majors in Foods and Nutrition and 251 in Institution Management or Institution Administration (U.S. Dept. of HEW, 1968b). According to figures from the Office of Education published in "Health Resources Statistics" (U.S. Dept. of HEW, 1968b), advanced degrees in Foods and Nutrition were awarded to 132 persons in 1966 and 24 in Institution Management or Institution Administration.

Some training for food service personnel in hospitals has been done by agencies other than the educational system. The American Dietetic Association offers a correspondence course for food service supervisors conducted in cooperation with the state dietetic associations (Hartman, 1964; Anon. 1964; Anon. 1965). Students enrolling in this course are required to be employed full time. Over 600 persons have been trained through this course since it began in 1961 and an enrollment of over 400 students is anticipated in 1969 (Zahasky, 1968).

In 1962, the American Hospital Association began conducting annual institutes to assist small hospitals with their food service problems (Anon. 1964). These institutes were planned for the cook manager and the food service supervisor. Similar short training sessions have been conducted as workshops by state dietetic associations and dietary consultants (Anon. 1964).

In the area of training, closer working relationships between educational agencies and hospitals are developing toward the educational institution conducting the training program and the service institution providing the clinical or practical part of the course. This trend is expected to increase in the future, with hospitals and educational agencies becoming more closely affiliated in the training of students for health careers (Kissick, 1967; U.S. Dept. of HEW, 1967b).

IV. FUTURE PERSONNEL NEEDS OF HOSPITAL FOOD SERVICES

It is difficult to define future needs for hospital food services as a separate entity in the food service industry because its members may come from both the health care professions and the food service field. Of all the personnel employed by what the U.S. Bureau of Census terms the "health services industry," approximately two thirds have education and training especially required for the health field, whereas the other one third are those who assist in providing health services but whose skills are not necessarily limited to this area (U.S. Dept. of HEW, 1968a). The hospital food service department includes personnel from both of these groups.

The National Restaurant Association estimated a total of 3,112,600 workers nationally in the food service industry in 1966 (Lattin, 1969). Of these, 300,000 were employed in hospitals and related institutions. For the total food service industry, which includes hospital food services, Lattin (1969) reported estimated requirements of 250,000 workers per year during the next decade, of which 75,000

will be new jobs and 175,000 in replacement positions for existing jobs. This total estimate was broken down into job levels with 10 percent or 25,000 expected to be needed in management or supervisory jobs, 16 percent or 40,000 in technical or skilled jobs, 44 percent or 110,000 in non-technical or unskilled jobs in which some training and experience is necessary and 30 percent or 75,000 in non-technical or unskilled jobs (Lattin, 1969).

The figure given by Lattin (1969) for replacements suggests the high turnover rate usually associated with food service. Kleiva (1967) conducted a study to gather information concerning turnover for a specific area of food service - the hospital dietary department. The survey included short-term, general care hospitals of 500 beds or over which were not under federal control. Findings showed that the national average annual turnover rate for these hospitals was 23 percent for professional full-time employees, 48 percent for professional part-time employees, 58 percent for non-professional full-time employees and 103 percent for non-professional part-time employees. For hospitals meeting this criteria in Tennessee, the study showed that turnover rates were 26 percent for professional full-time employees, zero for professional part-time employees, 76 percent for non-professional full-time employees and 108 percent for non-professional part-time employees.

The health services demand for professional dietitians is increasing steadily. In 1966, Hubbard et al. (1968) investigated the professional manpower needs of short-term hospitals which were not federally controlled. Based on the present employment pattern for

dietitians and the results of the survey the estimated number of dietitians needed for 1972 was 11,900, a position increase of 63 percent. For 1977, the projected need was 17,922, a position increase of 145 percent. Hospitals replying to the survey questionnaire gave a number of reasons for the additional positions, the primary ones being addition of hospital beds, the continued increase in extended care facilities and food services improvement. Of the estimate for 1972, 58 percent of the increase was attributed to expansion and 22 percent to replacement. The 22 percent replacement figure agrees closely with the 23 percent turnover among professional employees reported by Kleiva (1967). Of the projected needs for 1977, respective percentages for new positions and replacement were 57 percent and 30 percent.

The health services industry is one of the largest and most rapidly growing industries in the United States and hospitals represent a major part of this industry (U.S. Dept. of HEW, 1968a). Hospital beds have increased from 1.5 million in 1963 to 1.6 million in 1967 (U.S. Dept. of HEW, 1968b) and in 1966 hospitals employed more than two million people (U.S. Dept. of HEW, 1968a). The projected number of hospital employees for 1975 is 3,375,000 (U.S. Dept. of HEW, 1968a). While there are no estimates available as to how many of this number may be in hospital food service, it can be assumed that the requirement for food service personnel will increase proportionately.

V. SUMMARY

This review of literature has been directed toward information concerning the training programs conducted in hospitals for food service personnel, programs available through other agencies and food service personnel needs of the future.

The information found indicates that there are similarities in subject matter in the training programs reported. However, those institutions reporting training appear to plan programs to meet specific needs and individual situations which may differ from hospital to hospital.

A number of agencies other than hospitals offer training for some type of food service occupation. Little information was found relative to the adequacy with which hospital needs are being met by these programs, either quantitatively or qualitatively.

Because of the continuing expansion of health care facilities and the shortage of health manpower, it is anticipated that personnel needed for the hospital food service industry, both in new positions and as replacements for persons already employed, will continue to increase.

CHAPTER III

PROCEDURE

The purpose of this study was to identify the training programs and needs for food service personnel in selected hospitals in Tennessee and to obtain information regarding personnel needs in the future. Since similar studies are to be conducted in other areas of the food service industry in the state, this investigation was planned as a pilot study to develop methods and procedures for use in future research.

In order to obtain the desired information, a survey of the selected hospitals was conducted by means of a questionnaire which was completed during a personal interview.

I. DESIGN OF THE SURVEY

The 179 Tennessee hospitals which were licensed as of November, 1968 (State Hospital Licensing Board, 1968) were considered the total hospital population. This group did not include state mental hospitals or those under federal control. Hospitals of less than 25 beds were eliminated since it was assumed that they would not have a food service department large enough to be of value in obtaining the desired information.

A sample of hospitals which was representative of size, geographical location, type of food service operation, those having plans for expansion, and those not planning for increased bed capacity was

desired. In order to identify the sample, a limited survey of the 146 hospitals over 25 beds was conducted. A brief questionnaire was mailed to the administrators of these hospitals asking for the above information with a cover letter explaining the project (see Appendix B). Administrators not returning the questionnaires by the date requested in the cover letter were contacted by phone. A return of 127 or 86.9 percent was received by mail. The information was secured from 17 hospitals by phone and two administrators could not be reached.

In response to the preliminary questionnaire, 77 or 53.5 percent of the total hospital administrators contacted said they planned to expand their hospital facilities within the next five years. Eleven administrators said their food service departments were operated by contract food service. In addition to patients, 82 hospital food service departments served meals to both personnel and visitors; in 53 hospitals, only patients and personnel were served.

Hospitals were divided into three categories: those of 350 beds or over, those from 250 to 349 beds, and those from 25 to 249 beds. Sixteen hospitals fell in the first classification, six in the second, and the remaining 122 in the third. A total of 25 hospitals was selected for the survey. Based on the criteria given above, ten hospitals or approximately a 60 percent sample was selected from the first classification, three hospitals or a 50 percent sample was selected from the second classification and 12 hospitals or approximately a 10 percent sample was selected from the third classification. The stronger sample was selected from the large and medium-sized hospitals

because it was postulated that more valuable information concerning training and a better evaluation of the pilot study might be obtained from these groups. Hospitals surveyed ranged from 33 beds to 1400 beds. The one hospital in the state having a dietary internship program was included in the survey. Two hospitals using contract food service were included also, one in the large hospital category and one in the middle category.

Appointments for interviews were made by phone with each hospital administrator. The administrators then arranged for the interviewer to speak with the person in charge of the food service department during the visit to his hospital.

The interviews were conducted by the author and one assistant, both of whom are registered dietitians with hospital experience. Interviews were completed within a two week period. A training session was held with the second interviewer prior to the survey in order to familiarize her with the questionnaire and the procedure to be followed.

II. THE QUESTIONNAIRE

In order to secure accurate and complete information, interviews were scheduled with both the hospital administrator and the person in charge of the food service operation. A questionnaire was developed to be used in structuring the interview and to record the information (see Appendix C).

The first part of the questionnaire was designed for use in interviewing the hospital administrator. The questions, which were of

an open-end type, concerned the administrator's major problems relating to food service personnel and the qualifications he preferred in his food service department manager.

The remainder of the interview was held with the person in charge of the food service department, referred to in the questionnaire as the food service manager. Questions were asked pertaining to the educational background of this person, the types of continuing education programs attended and the type considered most valuable. Information also was solicited concerning the total number of food service employees and their job category.

Since the same questionnaire was to be used in surveys of other types of food services, it seemed more applicable to consider training programs and needs of food service personnel on the basis of general categories relating to job function, rather than using job titles which might differ from organization to organization. Accordingly, six major categories were developed, using a modification of those mentioned by Harwood (1965). Categories used were: (1) managerial, (2) supervisory, (3) clerical, (4) food preparation workers, (5) food service workers, and (6) food sanitation workers. For each of these categories an information sheet was designed, showing the general tasks included for that particular group of employees, the specific tasks they might be expected to perform, and finally, the skills and knowledge needed by the employee to function effectively in that particular category. This section represented the most important part of the questionnaire.

Using this information sheet as a guide, the food service manager was asked to indicate whether he considered that training in each of the skills or areas of knowledge listed should be the responsibility of the hospital, an outside agency, or shared between the two. The manager also was asked to indicate the skills and areas of knowledge listed that he considered most important for the employee to know and to add additional ones if necessary. Finally, the manager indicated those in which the hospital conducted training. For purposes of this study, training was defined as any planned process of instruction designed to bring the employee's job knowledge, skill and proficiency up to a desired level. No attempt was made to determine the length of the training programs or the type of training used.

The third part of the questionnaire related to future personnel needs. Questions were included pertinent to plans for additional food service employees, categories in which vacancies occurred at the time of the survey, those in which vacancies occurred most often and those in which vacancies were most difficult to fill. There were also questions regarding employee training prior to employment and identification of the person responsible for in-service training.

Before the survey, the questionnaire was tested in two hospitals, one small and one large, and these were not included in the sample selected. Some suggestions were made by these food service managers and the questionnaire was changed accordingly.

The desired information was secured from all participating hospitals and the questionnaire was completed in its entirety with the

exception of two small hospitals. In these, the food service managers had a limited educational background and for categories which were not represented in their departments, they preferred not to complete the questionnaire because of unfamiliarity with the information presented.

Answers to the first part of the questionnaire, which included the open-end type questions, were summarized and related answers grouped together. Under the question regarding major problems relating to food service personnel, all of the problems reported concerning personnel procurement were included under "Problems relating to personnel shortage" in the summary; those concerned with qualifications and training were grouped under "Problems relating to training," and all those having to do with stability and turnover were included under "Turnover." Under the question regarding desired qualifications for the person in charge of the food service department, answers relating to the manager's knowledge of the practical and scientific aspects of the operation of the food service department were reported under "Technical knowledge of the job"; those having to do specifically with ability to work with people were classified as "Knowledge of human relations."

The results and findings of the survey are discussed in the following chapter.

CHAPTER IV

RESULTS AND DISCUSSION

Personnel training and employment needs of food service departments in 25 selected hospitals in Tennessee were studied. Procedures also were developed to be used in similar investigations of other areas of the food service industry in the future.

Ten hospitals of 350 beds or over were selected for study, three of 250 to 349 beds and 12 of 25 to 249 beds. A survey of food service departments in these hospitals was conducted by personal interviews with the hospital administrator and the food service manager.

I. HOSPITAL ADMINISTRATOR RESPONSES

Characteristics of Hospitals

A brief preliminary survey of the 146 licensed Tennessee hospitals over 25 beds was made by mail in order to identify the sample desired (see Appendix B). Of this number, 144 administrators responded. Slightly more than 50 percent of these administrators said they planned expansion programs for their institution within five years. The majority indicated that their food service departments were operated by the hospital; only 11 hospitals used contract food service. In 82 of the hospitals, administrators said their food service departments served meals to personnel and visitors as well as patients, in 53 hospitals only patients and personnel were served, and in the remaining nine, meal

service was provided for patients only. Cafeteria service was used for personnel and visitors in most hospitals with 92 administrators reporting cafeterias operated by the food service department. In other hospitals, snack shops, coffee shops, vending machines and dining rooms with table service were reported. In a few of the small hospitals, personnel came to the kitchen and picked up trays which were served for them.

Problems Relating to Food Service Personnel

In each of the 25 hospitals selected for further study, interviews were scheduled with the food service manager and the hospital administrator. During the interview, administrators were asked to list their major problems relating to personnel in their food service departments (see Table 8, Appendix D). In all hospital categories, administrators indicated some concern with problems relating to personnel training. However, those in the smallest and largest groups of hospitals mentioned it most frequently. In the large hospitals personnel training was followed in frequency by problems relating to employee turnover and personnel shortage.

In the medium-sized category, which included three hospitals, two administrators mentioned turnover; training and personnel shortage were each mentioned by one, as were continuity of supervision and management and a need for positions on a professional basis.

Nine of the 12 administrators interviewed from small hospitals agreed that training was their major problem. This was apparently their

primary concern, since only three of them mentioned personnel shortage, which ranked second in problems of this group.

Qualifications Preferred in Food Service Managers

Qualifications most preferred by hospital administrators in their food service managers were American Dietetic Association membership, technical knowledge in the dietary field, administrative or managerial skills and knowledge of human relations (see Table 9, Appendix D). This agrees with Ross (1967) who included technical competency and a knowledge and understanding of people as two of the major items an administrator considers when evaluating the performance of his department heads.

In the large hospitals administrators listed technical knowledge most often, followed by American Dietetic Association membership and knowledge of human relations, which were mentioned by half the administrators interviewed.

In the medium-sized hospitals, American Dietetic Association membership and managerial skills were considered equally important. These were mentioned by two of the three administrators interviewed. All other qualifications in this group were mentioned by only one administrator.

Administrators in the small hospitals showed a decided preference for American Dietetic Association members. Secondly, they desired a food service manager with technical knowledge in the dietary field. The greater emphasis on American Dietetic Association membership in this

group may have indicated that many of the smaller hospitals have only one qualified dietitian or use a dietary consultant whereas the large hospitals may have several dietitians on their staff, and American Dietetic Association membership for the food service manager may not be considered so important.

II. FOOD SERVICE MANAGER RESPONSES

Description of Food Service Managers

The remainder of the interview was conducted with the person in charge of the food service department. Questions were asked relative to the educational background of each of these persons.

Educational levels of food service managers ranged from one manager in a large hospital who had completed a Dietary Internship plus a Master's Degree to two managers in small hospitals who had not completed high school. Of the 25 hospitals surveyed, 11 food service managers were members of the American Dietetic Association.

Six of these American Dietetic Association members were employed in the large hospital category. Three other managers in this group were college graduates, one of whom had done some graduate work. Two of these, however, said they did not have training in the food service field during college. The tenth manager had had food service training in the army. No attempt was made to determine the type or extent of training of this manager.

In the group of hospitals ranging from 250 to 349 beds, one manager had completed a Dietary Internship and was an American Dietetic

Association member, another had a degree from a four-year college and the third had received a General Educational Development Certificate during his army service. The manager who was the college graduate had received food service training; the third person had not.

The smaller hospitals indicated that they had difficulty in securing the services of qualified people as food service managers. Four of the managers in this group were American Dietetic Association members. Two of these were classified as consultant dietitians, although they apparently assumed a considerable amount of responsibility for the operation of the department. One manager in a small hospital had graduated from college with a major in Foods and Nutrition and had completed some graduate work. Of the remaining managers in this group, two had completed two years of college, two had post high school level training in areas unrelated to food service, one was a high school graduate and the two others had not completed high school.

Twenty three of the 25 managers interviewed indicated that they attended some type of continuing education program designed for food service managers and several had attended more than one type of program. Programs attended most often by all managers were professional association or trade conventions and food service workshops as shown in Table 1. The popularity of these programs may have been that they are of short duration and pertain directly to the food service operation. The third most frequently attended program was the hospital sponsored management development program. Adult education courses and college or university courses were attended by few managers. This may have been

TABLE 1
CONTINUING EDUCATION PROGRAMS FOR FOOD SERVICE MANAGERS

Program	Attended ^a			Most Helpful ^a		
	L	M	S	L	M	S
Adult education courses	10	--	8	10	--	8
College or university courses	30	33	8	20	33	42
Management development courses	60	67	33	30	--	--
Food service workshops	80	67	67	50	67	42
Professional association or trade convention	90	100	50	30	33	8

L = Large hospitals 350 beds or over

M = Medium hospitals 250 - 349 beds

S = Small hospitals 25 - 249 beds

^aPercentage based on total of 10 large, 3 medium and 12 small hospitals.

influenced by the location of some of the hospitals and the lack of availability of courses that were related to the food service profession.

Types of continuing education programs which managers considered most helpful are shown in Table 1. Food service workshops were considered the most valuable by managers in each hospital size category. Courses offered by colleges or universities also were considered to be helpful.

The reason for the marked difference between the number of managers in small hospitals who responded that college or university courses would be helpful and those who had actually attended them is not clear. Interest in such courses may have been stimulated by the continuing education requirement for registered dietitians, since this was mentioned by some of the managers during the interview. Several managers said that they were interested in attending college or university courses but family responsibilities or the location of the college where these courses were taught made attendance more difficult.

In answer to this question also, several managers indicated more than one type of continuing education program as being helpful.

Description of Food Service Personnel

Employee distribution. Food service managers were given a reference sheet showing the six personnel categories to be studied in the survey: (1) managerial, (2) supervisory, (3) clerical, (4) food preparation workers, (5) food service workers, and (6) food sanitation workers (see Appendix A). Each of the managers agreed that all food

service employees could be classified into one of these categories, and the number in each category was reported. In the event an employee performed tasks in more than one category, managers were asked to classify the worker in the category in which the greater part of his tasks were performed. The ratio of personnel in each job category to the total number of employees was similar for all hospitals (see Table 10, Appendix D). The large hospitals had a slightly higher percentage of employees in the supervisory category. The medium-sized hospitals reported fewer supervisory and more clerical personnel. There appeared to be a wide range of clerical duties performed by food service personnel which varied considerably from hospital to hospital. In some hospital situations this created difficulty in personnel classification for this category. The most striking difference in personnel distribution was the large number of personnel in the food preparation worker category and the small number in the food service worker category in small hospitals. Because of the small staff in many of these hospitals, workers who prepared the food also were responsible for its service. However, the greater part of their duties was in the food preparation category and these workers were so classified.

Employee turnover. In the opinion of food service managers, the job categories having the greatest employee turnover were food sanitation workers, food service workers and food preparation workers (see Table 10, Appendix D). In large hospitals, the problem of turnover occurred

most often with food sanitation workers. In the medium-sized hospitals, two of the three managers interviewed said employee turnover was greatest in both the food service and food sanitation worker categories. In the small hospitals, turnover occurred primarily in the food preparation worker category. Since many of the food preparation workers in small hospitals were also food service workers, this figure might be interpreted as including some food service workers.

Positions which were most difficult to fill generally followed the same pattern as those in which turnover occurred most often (see Table 10, Appendix D). In large and medium-sized hospitals, food sanitation workers were reported as being the most difficult to replace; in the small hospitals, food preparation worker positions were the most difficult to fill.

Future employee additions. Hospital expansion plans reported by administrators were reflected by the number of food service managers planning to add personnel to their departments. Seventeen of the 25 managers interviewed planned to add departmental positions; 16 of these indicated hospital expansion as the reason. The seventeenth planned additional employees to improve departmental organization. All job categories were represented in the positions to be added.

III. MANAGERIAL CATEGORY

Managers were given a prepared information sheet showing the general tasks which might be expected of personnel in each job category.

The specific tasks which they might be expected to perform and the skills and knowledge they would be assumed to need in order to perform these tasks most effectively were included (see Appendix C). If the managers wished to make additions or comments, these were noted. Managers were asked to indicate for which of the skills and areas of knowledge they considered training a responsibility of the hospital, for which it should be the responsibility of some outside agency and for which it should be a shared responsibility. They also were asked to indicate the areas in which training was presently offered by their hospital and finally, those they considered most important for the employee to know. This was repeated for each of the six job categories.

Since the hospitals were grouped according to size in order to select a representative sample, discussion of the opinions of food service managers regarding employee training will be primarily concerned with the results as shown by the combined total of hospitals interviewed. The reactions of hospitals within each size group are included in Tables 11 through 16, Appendix D.

All of the managers agreed with the list of tasks and the skills and knowledge as presented for managerial personnel. No suggestions for additions or changes were made for this category. Hospital reaction to training for managerial personnel as a total group is shown in Table 2.

Importance of Skills and Knowledge

In the combined total of all interviews regarding skills and areas of knowledge most important for managerial personnel to know,

TABLE 2
HOSPITAL REACTION TO TRAINING FOR MANAGERIAL PERSONNEL^a

Skill or Knowledge	Importance	Hospitals Conducting	Hospital Resp.	Outside	
				Agency Resp.	Shared Resp.
Human relations	94	44	16	28	56
Communications	88	44	20	28	52
Management principles	88	44	8	52	40
Record keeping	44	36	28	44	28
Food procurement	56	32	28	40	32
Layout and design of equipment and plant	44	24	4	44	52
Human nutrition and food science	84	16	4	72	24
Quantity food preparation and service	52	24	20	56	24
Menu planning	72	16	20	48	32
Personnel administration	76	32	28	36	36
Use and care of equipment	48	40	8	28	64
Specific information regarding types of feeding requirements for certain groups	24	24	8	32	60

^aPercentage based on total of 25 hospitals in study.

human relations was most frequently listed, followed by communications and management principles, which were considered of equal importance. Human nutrition and food science ranked third, then personnel administration and menu planning. Considered least important by all hospitals was specific information regarding feeding requirements for certain groups.

Only about one third of the managers in the large hospitals considered layout and design of equipment and plant important (see Table 11, Appendix D), which is surprising in view of the number of expansion programs planned or underway.

Human nutrition and food science was considered of primary importance by managers in small and medium-sized hospitals with 100 percent of the managers in each of these groups indicating it as being important for managers to know. This may have reflected the difference in staff size, with managers in these hospitals having more direct responsibility for patient care and therapeutic dietetics than those in large hospitals. Menu planning also was considered more important by small and medium-sized hospitals than by large ones, perhaps for the same reason.

Personnel Training

Hospitals appeared to conduct only limited training programs for managerial personnel. In the combined total of all hospitals, managerial training was reported by less than half of those interviewed as shown by Table 2. Training reported most often was in the rather broad

areas of human relations and communications, which some administrators and food service managers had indicated as being hospital wide training programs, and in management principles and use and care of equipment.

Hospital responsibility. Managerial training was not generally considered the responsibility of the hospital in the opinion of food service managers interviewed. As shown in Table 2, page 37, record keeping, personnel administration, and food procurement were the areas most often mentioned but only by approximately 25 percent of the managers.

Food service managers in the medium-sized group of hospitals apparently had even more decided opinions about this, with all of them agreeing that managerial training should not be a hospital responsibility in any of the areas listed (see Table 11, Appendix D).

Outside agency responsibility. In the majority of the areas listed, more food service managers considered that managerial training should be the responsibility of an outside agency than a shared or a hospital responsibility. Training in human nutrition and food science was mentioned by the largest number as being the responsibility of some agency other than the hospital, followed by quantity food preparation and service, management principles and menu planning, see Table 2. Areas in which the fewest managers considered training an outside responsibility were human relations, communications, and use and care of equipment.

Shared responsibility. The area in which the largest number of managers noted that training should be shared was in use and care of

equipment, shown in Table 2, page 37, perhaps because hospitals considered equipment as being planned for a specific use and different from hospital to hospital. Secondly, managers considered specific information regarding types of feeding requirements for certain groups as a shared responsibility. The other areas of skills and knowledge in which approximately 50 percent of the managers wished to have a part in training for managerial personnel were human relations, communications, and layout and design of equipment and plant.

IV. SUPERVISORY CATEGORY

Food service managers agreed with the tasks and the skills and knowledge as presented for supervisory personnel. It was suggested that record keeping be added to the tasks they might be expected to perform. In some of the small hospitals, this job category did not exist, because the number of employees did not justify a supervisor other than the food service manager. One manager in this situation preferred not to express an opinion regarding two of the items listed under skills and knowledge. Reaction of all food service managers regarding training for supervisory personnel is shown in Table 3.

Importance of Skills and Knowledge

As in the managerial category, emphasis was placed on human relations in the skills and knowledge considered most important for supervisory personnel. Again, human relations was mentioned most often by the total group interviewed. Second were principles and standards

TABLE 3
HOSPITAL REACTION TO TRAINING FOR SUPERVISORY PERSONNEL^a

Skill or Knowledge	Importance	Hospitals		Hospital Resp.	Outside Agency Resp.		Shared Resp.
		Conducting	Conducting		Agency	Resp.	
Human relations	88	56	24	8	68		
Communications	84	56	32	12	56		
Use and care of equipment	80	76	36	12	52		
Menu terminology	64	56	44	24	32		
Principles of nutrition and diet therapy	72	64	20	40	40		
Sanitary and safety standards	76	76	20	24	56		
Mathematics as related to cost control ^b	29	41	33	42	25		
Principles and standards of quantity food preparation and service	84	64	28	20	52		
Effective use of non-supervisory personnel ^b	64	62	25	12	62		

^aPercentage based on total of 25 hospitals in study.

^bPercentage based on 24 hospitals.

of quantity food preparation and service and communications, which were mentioned by an equal number of managers. Use and care of equipment and sanitary and safety standards also were considered important for this group, which might be expected since supervisors frequently work with these areas. Managers as a group considered mathematics as related to cost control least important for supervisory personnel to know, perhaps because many supervisors are employed in departmental functions unrelated to cost control.

Personnel Training

More training programs were being conducted by hospitals for supervisory personnel than for the managerial category. As a group, managers reported training in use and care of equipment and sanitary and safety standards most often as shown in Table 3. This might be expected, since these areas represent the more practical aspect of the supervisor's job and also were considered two of the skills and areas of knowledge most important for the supervisor to know. Equal numbers of managers listed training programs in principles of nutrition and diet therapy, and in principles and standards of food preparation and service, which were the second most frequently mentioned. Training in the effective use of non-supervisory personnel was in third position. This was largely attributed to the high number of training programs in this area in large hospitals (see Table 12, Appendix D). The lowest number of training programs was reported in mathematics as related to cost control which is consistent with the opinion of managers that this was least important for the supervisor to know.

Hospital responsibility. Although managers indicated that more training for supervisors than for managers should be done by the hospital, the majority did not consider it a hospital responsibility. Most frequently mentioned was menu terminology, considered the responsibility of the hospital by 11 of the 25 managers interviewed, as shown in Table 3, page 41.

Outside agency responsibility. Few food service managers considered that responsibility for training supervisory personnel should be completely assumed by some outside agency, as illustrated by Table 3. The two areas in which training was most frequently considered the responsibility of some agency other than the hospital by the total group were principles of nutrition and diet therapy and mathematics as related to cost control.

Shared responsibility. With the exception of three areas, more than half of the total managers interviewed indicated that all training for supervisory personnel should be shared, as shown in Table 3. As mentioned above, they did not consider training a shared responsibility in menu terminology and mathematics as related to cost control. The third area was principles of nutrition and diet therapy which was considered equally a shared responsibility and an outside agency responsibility.

In the large hospitals, managers showed a marked preference for shared training with 50 percent or more of the managers agreeing that

training should be shared in all areas except mathematics as related to cost control (see Table 12, Appendix D).

V. CLERICAL CATEGORY

The information presented regarding clerical personnel appeared to create some difficulty for managers. In some of the small hospitals, clerical duties were performed by the manager and there were no employees in the clerical classification. Two managers who had no personnel in this category preferred not to complete this part of the questionnaire. In the medium and large hospitals, a variety of clerical duties was performed by personnel in several job categories. Some managers commented that it was difficult to combine training needed by clerical people under one list of skills and knowledge because of this wide range of tasks. In one of the large hospitals, the manager suggested that writing therapeutic diets be added to the list of skills and knowledge needed by clerical personnel. No other additions or changes were suggested. The opinion of food service managers regarding clerical personnel training is shown in Table 4.

Importance of Skills and Knowledge

Managers as a group apparently regarded the receiving of information and communicating it to others an essential part of the clerical position. Twenty of the 25 managers interviewed considered communications as one of the most important skills that clerical personnel should have. Human relations was considered important by the

TABLE 4
HOSPITAL REACTION TO TRAINING FOR CLERICAL PERSONNEL^a

Skill or Knowledge	Importance	Hospital			Outside	
		Conducting	Hospital Resp.	Agency Resp.	Shared Resp.	
Human relations	72	48	28	12	60	
Communications	80	52	32	12	56	
Basic mathematics	64	--	8	80	12	
Menu and diet terminology	60	44	44	16	40	
Operation of office machines	36	12	4	71	25	
Bookkeeping	48	16	8	67	25	
Operation of cash register ^b	33	25	25	58	17	
Food item terminology, packaging unit, and proper storage ^b	46	50	50	13	37	
General principles of food inventory control, food issue and stock room operation ^b	67	62	29	13	58	
Sanitary standards as related to food storage ^c	50	58	26	26	48	
Criteria used in evaluation of food as purchased ^b	37	41	25	12	63	

^apercentage based on total of 25 hospitals in study.

^bpercentage based on 24 hospitals.

^cpercentage based on 23 hospitals.

second largest number. Of third importance, basic mathematics, menu and diet terminology, general principles of food inventory control, food issue and stock room operation were each indicated by approximately two thirds of the total managers interviewed as important for clerical personnel to know. Managers appeared more concerned with clerical duties directly associated with food service than with those usually performed by office personnel, since only nine of the 25 managers listed operation of office machines as a skill they considered important.

Managers in the medium-sized hospitals did not share the opinion of the other managers regarding this. Each of the three managers interviewed in the medium-sized hospitals indicated bookkeeping and operation of office machines as most important for clerical personnel.

Personnel Training

About half of the hospitals conducted training for clerical personnel in human relations and communications, as shown in Table 4. The other training programs reported by hospitals for this group were directly concerned with food service. According to the total group of managers, clerical personnel were being trained by 50 percent or more of the hospitals in general principles of food inventory control, food issue and stock room operation, in sanitary standards as related to food storage and in food item terminology, packaging unit and storage. None of the managers reported training in basic mathematics, and few hospitals reported any training conducted in bookkeeping and operation of office machines.

The absence of clerical personnel in some small hospitals was reflected by the lower number of training programs reported by these managers. The only areas in which training was reported by 50 percent of these hospitals were human relations and communications.

Hospital responsibility. The opinion of all food service managers indicated that hospitals did not consider training for clerical personnel their responsibility except in areas which might apply to specific hospital situations. Menu and diet terminology and food item terminology, packaging unit and proper storage were those listed most often as a hospital responsibility, as shown by Table 4, page 45.

Outside agency responsibility. Skills and knowledge which might be considered a part of general clerical training were considered by the total group of managers to be the responsibility of some agency other than the hospital. Included were basic mathematics, operation of office machines and bookkeeping, shown in Table 4. Slightly more than half of the total managers interviewed indicated that training in cash register operation also should be done by an outside agency.

Shared responsibility. Opinions of managers regarding shared training responsibility were not as clear cut as those regarding outside agency responsibility. As demonstrated by Table 4, human relations was again considered a shared responsibility by the total group, as it was for the managerial and supervisory job categories. Secondly, managers listed criteria used in evaluation of food as purchased, followed by

general principles of food inventory control, food issue and stock room operation and communications.

VI. FOOD PREPARATION WORKERS

Managers were in agreement with the tasks and skills and knowledge as presented for food preparation workers. One manager noted that food preparation workers should have some responsibility for cleaning duties and that this should be added to the list. In the small hospitals, food preparation workers were often the food service workers, though the greater portion of their time was spent in food preparation activities. The reaction of all hospitals to training for food preparation workers is shown in Table 5.

Importance of Skills and Knowledge

Managers were interested in knowledge of sanitation and personal hygiene for all personnel directly concerned with food service. This was considered one of the most important areas for food preparation workers to know by 23 of the 25 managers interviewed. The second largest number of managers considered equally food preparation for special diets and use of standardized recipes as important. It is surprising that the actual knowledge of food preparation, represented on the list as principles of quantity food preparation and service and their application, was in third position with 19 of the 25 managers mentioning this as a skill they consider most important. Menu terminology, quality standards for food and use and care of equipment also were mentioned by approximately three fourths of the total group.

2

TABLE 5
HOSPITAL REACTION TO TRAINING FOR FOOD PREPARATION WORKERS^a

Skill or Knowledge	Importance	Hospitals Conducting	Hospital Resp.	Outside	
				Agency Resp.	Shared Resp.
Human relations	56	60	32	16	52
Communication	68	68	32	12	56
Sanitation and personal hygiene	92	96	32	16	52
Menu terminology	72	80	52	8	40
Principles of nutrition as related to food preparation	60	76	32	20	48
Use of standardized recipes	80	76	44	24	32
Principles of quantity food preparation and service and their application	76	68	20	24	56
Food preparation for special diets	80	88	56	12	32
Quality standards for food	72	76	28	20	52
Proper food handling and storage	68	84	16	32	52
Use and care of equipment	72	92	28	20	52
Safety	64	76	24	8	68
Basic mathematics	44	24	16	52	32
Work simplification	48	64	44	28	28
Chief cook must have knowledge of supervisory techniques	44	40	16	28	56

^aPercentage based on total of 25 hospitals in study.

Personnel Training

A number of hospitals conducted training for their food preparation personnel. Food preparation worker positions were reported as one of the job categories in which the most employee turnover occurred and in which jobs were most difficult to fill. More training programs in this category may have been required because of new or inexperienced personnel. With one exception, all hospitals reported training in sanitation and personal hygiene, as shown by Table 5, which is consistent with the opinion of managers that this was important for food preparation people to know. Twenty three of the 25 hospitals reported training in use and care of equipment. The only areas in which hospitals apparently were doing little training for food preparation personnel were in basic mathematics and in supervisory techniques for the chief cook.

Hospital responsibility. In spite of the large number of training programs being conducted by hospitals, few of the managers considered training for food preparation personnel a hospital responsibility. The only areas in which slightly more than half of the managers interviewed responded that these people should be trained by the hospital were menu terminology and food preparation for special diets, shown in Table 5. Eleven of the 25 managers said that training for food preparation workers in use of standardized recipes and work simplification should also be done by the hospital.

Outside agency responsibility. Training for food preparation workers was not generally considered the responsibility of an outside agency. Only in basic mathematics did 50 percent of the managers indicate that training should be done by some outside agency, as shown by Table 5, page 49.

Shared responsibility. The majority of the food service managers considered training for food preparation workers a shared responsibility. Table 5 shows that with the exception of basic mathematics, work simplification, food preparation for special diets and use of standardized recipes, approximately 50 percent of the total managers indicated that training for food preparation workers should be shared in all areas.

VII. FOOD SERVICE WORKERS

As indicated above, in some of the small hospitals, the food preparation workers also functioned as food service workers with a small percentage of their time being spent in food service activities.

Suggestions made by managers regarding the list of tasks and skills and knowledge needed by food service workers were concerned primarily with food service in a hospital situation. One manager remarked that since these employees would be serving food for patients, they should have a limited knowledge of nutrition; another commented that they should have some knowledge of modified diets. A third manager stated that their duties in cleaning and housekeeping routines should be made more specific. The opinion of food service managers in all

hospitals regarding training for food service workers is shown in Table 6.

Importance of Skills and Knowledge

Sanitation and personal hygiene was considered most important for this group by 24 of the 25 managers interviewed. Human relations and food display and service were mentioned by the second largest number of managers, who were apparently considering the relationship of the food service worker to the customer or the patient. These were followed closely by communications. Knowledge of food preparation and work simplification was considered least important by managers for food service workers to know.

Personnel Training

Training for food service workers was conducted by the majority of the hospitals in all of the areas listed. Those most frequently reported by the total group of managers were in sanitation and personal hygiene, safety, use and care of equipment and food display and service, shown in Table 6. It is interesting that, although hospitals reported training in safety and use and care of equipment often, these were not the areas they considered most important for food service workers to know.

Hospital responsibility. Training for food service workers was most often considered a hospital responsibility in the areas of menu terminology and work simplification as shown in Table 6. Limited

TABLE 6
HOSPITAL REACTION TO TRAINING FOR FOOD SERVICE WORKERS^a

Skills or Knowledge	Importance	Hospitals Conducting	Hospital Resp.	Outside	
				Agency Resp.	Shared Resp.
Human relations	76	52	32	12	56
Communications	72	48	36	8	56
Sanitation and personal hygiene	96	88	32	20	48
Safety	64	88	36	12	52
Food display and service	76	80	40	16	44
Quality standards for food	60	56	24	20	56
Use and care of equipment	60	84	44	12	44
Menu terminology	68	68	60	12	28
Limited knowledge of food preparation	48	56	48	20	32
Work simplification	48	52	52	20	28

^aPercentage based on total of 25 hospitals in study.

knowledge of food preparation was considered a hospital responsibility by slightly less than half of the total managers.

Outside agency responsibility. The opinions of the total group of food service managers indicated that they did not generally consider training of food service workers the responsibility of an outside agency in any area, as demonstrated by Table 6.

These opinions appeared to be strongest among the managers in small hospitals where only one manager considered training an outside agency responsibility in each area, except for food preparation where none of them considered it as such (see Table 15, Appendix D).

Shared responsibility. Approximately 50 percent of the total group were of the opinion that training in human relations, communications, quality standards for food, safety and sanitation and personal hygiene should be shared by the hospital and an outside agency, shown by Table 6. Food display and service was considered a shared responsibility by only a slightly larger number of managers than those considering it a hospital responsibility, and training in use and care of equipment was considered equally a shared and a hospital responsibility.

VIII. FOOD SANITATION WORKERS

All food service managers agreed with the list of tasks and skills and knowledge as presented for food sanitation workers. With the exception of one manager who suggested that "transporting food service equipment such as food carts" should be added to the list of

tasks usually performed by these employees, no additions or suggestions were made. Table 7 indicates the reaction of all food service managers to training for food sanitation workers.

Importance of Skills and Knowledge

As might be expected, sanitation and personal hygiene, safety, and use and care of equipment were considered most important for food sanitation workers in the opinion of the total group of managers.

Personnel Training

Training was reported for food sanitation workers in the areas which managers had considered most important for them to know. Twenty-four of the 25 managers interviewed said their training programs for food sanitation workers included safety, and 23 of the 25 conducted training in use and care of equipment and in sanitation and personal hygiene, shown by Table 7. Training in all other areas listed for food sanitation workers was reported by 50 percent or more of the total managers as well.

Hospital responsibility. The opinions of all managers regarding the responsibility for training food sanitation workers were fairly evenly divided as to hospital or shared responsibility. Work simplification was considered a hospital training responsibility, shown in Table 7, as it was for food service and food preparation workers, perhaps because managers felt that the mechanics of performing the various jobs might differ from hospital to hospital. Human relations and

TABLE 7
HOSPITAL REACTION TO TRAINING FOR FOOD SANITATION WORKERS^a

Skill or Knowledge	Importance	Hospitals		Outside	
		Conducting	Hospital Resp.	Agency Resp.	Shared Resp.
Human relations	52	56	44	12	44
Communications	68	52	40	8	52
Sanitation and personal hygiene	96	92	36	28	36
Safety	80	96	32	16	52
Use and care of equipment	96	92	40	8	52
Work simplification	48	60	48	24	28

^aPercentage based on total of 25 hospitals in study.

sanitation and personal hygiene were considered equally a hospital and a shared responsibility.

Outside agency responsibility. As a group, few managers felt that an outside agency should train their food sanitation workers, demonstrated by Table 7. A low percentage of managers indicated interest in training by an outside agency in each of the areas listed.

Shared responsibility. The opinions of all managers interviewed indicated that approximately half of them regarded training in communications, safety, and use and care of equipment as a shared responsibility, as shown in Table 7. As mentioned above, training in human relations and sanitation and personal hygiene was considered equally a shared and a hospital responsibility.

CHAPTER V

SUMMARY

Twenty-five licensed Tennessee hospitals, which were considered representative of size, geographical location, type of food service and planned expansion were selected for a pilot study of personnel training and employment needs of hospital food services. A survey of these hospitals was conducted by personal interviews with the hospital administrator and the food service manager.

Fifteen of the 25 administrators interviewed considered employee training as one of their major problems relating to food service personnel. Other problems frequently mentioned were employee turnover and personnel shortage.

The qualifications administrators desired in food service managers were American Dietetic Association membership, technical knowledge in the dietary field, administrative or managerial skills and knowledge of human relations. However, some administrators reported difficulty in securing the services of qualified managers, especially in small hospitals.

Food service managers employed by these administrators were asked questions relative to their background and training. Answers indicated educational backgrounds ranging from American Dietetic Association membership plus a Master's Degree to less than high school level. Several managers had had no formal food service training in preparation for the managerial job.

Twenty-three of the 25 managers interviewed said they attended some type of continuing education program, with food service workshops and professional or trade association meetings being attended most often. Managers stated that food service workshops would be the most helpful type of continuing education program for their particular job. Although college and university courses had been attended by few managers as a continuing education program, it was indicated that they also would be helpful. Interest in such courses perhaps was stimulated by the continuing education requirement for registered dietitians.

Food service employees were studied in six major job categories: (1) managerial, (2) supervisory, (3) clerical, (4) food preparation workers, (5) food service workers, and (6) food sanitation workers. In small hospitals food preparation and food service worker classifications often were combined. Since the greater percentage of the tasks of these employees were in the area of food preparation, they were classified in this category.

Food service managers indicated that their greatest employee turnover was in the food sanitation worker, food service worker and food preparation worker categories, respectively. These same classifications were considered those in which positions were most difficult to fill.

Food service managers were asked their opinion regarding the adequacy of a prepared list of skills or areas of knowledge assumed to be needed by employees in each job category in order to function most effectively. Managers then indicated those which they considered most

important for personnel to know, those in which training was conducted by the hospital, and whether training should be the responsibility of the hospital, an outside agency or shared between the two.

I. SKILLS AND KNOWLEDGE

Some of the same skills and areas of knowledge were listed for several job categories. Human relations and communications were two of those common to each job role. Managers considered these as being most important for managerial, supervisory, and clerical personnel and food service workers. They were not considered so important for food preparation and food sanitation workers.

Use and care of equipment, also listed for all job classifications except clerical was considered most important for supervisory personnel, food preparation workers and food sanitation workers. It was regarded as less important for managerial personnel and for food service workers.

Sanitation and personal hygiene, listed for food preparation, service, and sanitation workers was considered important for each of these categories by over 90 percent of the managers interviewed.

Of the skills and areas of knowledge listed only for managerial personnel, management principles, human nutrition and food science, personnel administration, and menu planning were those which managers agreed were most important.

For supervisory personnel, managers appeared interested in the more practical aspects of food service. They considered principles and

standards of quantity food preparation and service, sanitary and safety standards, and principles of nutrition and diet therapy necessary as well as those mentioned above.

Managers indicated little interest in the importance of the usual office skills for clerical personnel except for communications and human relations. They considered as more important the aspects of clerical work which might be directly concerned with food service. Menu and diet terminology, principles of food inventory control, food issue and stock room operation were mentioned frequently by managers as important for clerical personnel, as was sanitary standards related to food storage.

In addition to the skills and areas of knowledge common to several job categories as mentioned above, all aspects of quantity food preparation including preparation of food for special diets, use of standardized recipes, quality standards for food and menu terminology were considered an essential part of training for food preparation personnel.

For food service workers, knowledge of food display and service was indicated by a number of managers to be important, as well as human relations, communications, and sanitation and personal hygiene mentioned earlier.

More managers agreed that safety was important for food sanitation workers than for any other group. The reason for this is not clear since it would seem that other food service employees as well would be subjected to the hazards involved in quantity food preparation and

service. As indicated above, sanitation and personal hygiene also were considered important for food sanitation workers.

II. TRAINING

For purposes of this study, training was defined as any planned process of instruction designed to bring the employee's job knowledge, skill and proficiency up to a desired level.

Although little managerial training was done by hospitals, training in human relations, communications, and management principles was reported most often.

Sanitary and safety standards, principles of nutrition and diet therapy and principles and standards of quantity food preparation and service were reported most often as training for supervisory personnel. Some supervisory training also was being done in the effective use of non-supervisory personnel.

For the clerical employee classification, hospitals appeared to conduct training primarily in those aspects of clerical work which were directly associated with food service. While approximately half of the hospitals reported training in communications for clerical personnel, sanitary standards as related to food storage and general principles of food inventory control, food issue and stock room operation were mentioned most often.

As the skill and level of training decreased, more training programs were reported by hospitals. Training for food preparation workers was conducted by over 75 percent of the hospitals interviewed

in nutrition as related to food preparation, use of standardized recipes, food preparation for special diets, quality food standards and food handling and storage.

For food service workers, hospitals stressed training in food display and service, with 20 of the 25 managers interviewed reporting such training.

Over half of the hospitals interviewed reported training for food sanitation workers in each of the six skills and areas of knowledge listed for this job category.

In addition to those mentioned above, some of the skills and areas of knowledge were common to several job categories. Use and care of equipment was one of those included for all job classifications except clerical, with training by hospitals being reported for each classification. More training in use and care of equipment apparently was being done for food preparation, food service and food sanitation personnel than for the managerial or supervisory job classification.

Approximately 90 percent of the hospitals reported training for food preparation, food service and food sanitation workers in sanitation and personal hygiene. Training in safety for these job classifications also was emphasized by a number of hospitals.

Hospital responsibility. The opinion of food service managers regarding training responsibility appeared to follow a general pattern. Hospitals apparently felt they should assume training responsibility for tasks which might differ from hospital to hospital depending on specific

food service situations. Managers indicated that training should be a hospital responsibility in such areas as menu and diet terminology, work simplification, food item terminology and storage and some aspects of food preparation.

Outside agency responsibility. Food service managers interviewed generally agreed that training for managerial personnel could best be done by an outside agency in the majority of the areas listed. For other job classifications, skills and areas of knowledge such as office procedures and basic mathematics which were only indirectly related to food service, also were considered the responsibility of an outside agency.

Shared responsibility. With the exception of managerial personnel, training for food service personnel in most of the areas listed was considered a shared responsibility.

This response might indicate that while hospitals would like the support and assistance of an outside agency in training employees, they also would like to have a part in planning the training program for their particular needs.

An increasing trend toward a closer working relationship between educational agencies and hospitals with the educational institution conducting the training and the service institution providing the practical or clinical experience was reported in the review of literature (Kissick, 1967, U.S. Dept. of HEW, 1967b). In view of managerial opinion as indicated by this pilot study, such a trend might have

implications for future training for food service personnel, with emphasis being placed on cooperative programs.

The need for training for food service workers is indicated by the number of hospitals conducting personnel training programs. This need is further indicated by the limited number of workers who have had food service training prior to employment. According to food service managers, the estimated percentage of employees having food service training before employment ranged from zero to 15 percent.

It is expected that the completed investigation of training and employment needs of food services will be studied in relation to programs offered by the educational system. If the information from the pilot study regarding the low percentage of trained workers employed by hospital food services is supported by additional surveys, it also might be feasible to determine where the graduates of such food service training courses are being employed.

CHAPTER VI

RECOMMENDATIONS FOR FUTURE STUDIES

Procedures used in this study generally were satisfactory for a hospital situation. Administrators and food service managers were receptive and willing to take time to provide the desired information for the questionnaire. It is anticipated that some modification may be necessary in order to make the survey more appropriate for other segments of the food service industry. The following changes in questionnaire format and survey procedure are recommended based on the pilot study:

I. THE QUESTIONNAIRE

1. The preliminary questionnaire (see Appendix B), which was used to identify the sample, was designed specifically for hospitals. Should this type of information be desired from other food services, questions would need to be adapted to that area. In Questionnaire II (see Appendix C), direct references to hospitals such as "ask Hospital Administrator" should be changed so as to be appropriate to the title of the person being interviewed.
2. In Questionnaire II, it is recommended that the term "food service manager" be changed to "the person in charge of food service" since food service manager is associated in some cases with a job title instead of a job function.

3. In Question 11, Questionnaire II, it is suggested that the statement regarding total food service employees be changed to read "total positions available" so that vacancies will be included in the total number.
4. It also is suggested that the order of questions be changed so that those relative to the education of the person in charge of food service will be asked before those regarding the number and division of employees. This would provide a more logical progression from division of employees into the various categories to the training needed for each category.
5. In Question 16, Questionnaire II, the word "formal" should precede "training in the food service field."
6. In Question 18, Questionnaire II, the word "evening" in sections (b) and (c) referring to adult education and college or university courses should be deleted. It was determined that some managers had been able to take educational leave to attend regular college sessions and that some had been able to take time from their working day to attend courses.
7. If further work is done in the hospital food service area or in nursing home food service, the position of the dietary consultant should be clarified on the questionnaire, since more and more consultants are working in small hospitals and nursing homes. These people should not be classified as a food service manager even though they may be better able to

evaluate training needs than the person in charge of the food service operation.

8. Managers were asked if they felt the information regarding the various job roles should be changed. Suggestions made which were most pertinent to the job roles as they were described are:
 - a. Under the specific tasks of the Managerial Category, the words "or directs planning" should be inserted before the word "menu" in the second paragraph.
 - b. "Maintaining Records" should be added to the list of skills and knowledge needed for supervisory personnel.
 - c. The word "special" in paragraph four, under Skills and Knowledge of Food Preparation Workers should be changed to "modified."
 - d. "Limited knowledge of modified diets" should be added to the skills and knowledge needed for Food Service Workers when applied to a situation involving patient service.
 - e. "May transport food service equipment such as food carts" should be added to the list of specific tasks for Food Sanitation Workers.
9. The information presented to managers regarding the Clerical Category created some difficulty. This job role does not exist in small hospitals, and in the large ones, apparently a number of employees perform some clerical duties which are

different from hospital to hospital. Because a similar situation is anticipated in other areas of the food service industry, it is recommended that consideration be given to omitting this personnel category.

10. References to patient food service or diet therapy and modified diets should be deleted from the information regarding job roles when applying it to food services other than hospitals or nursing homes.
11. Tabulation and evaluation of results could be simplified if some of the skills and areas of knowledge for the various job categories were combined to make broader areas but a shorter list.

II. SURVEY PROCEDURE

Few changes are suggested in procedure. Little difficulty was encountered with the mechanics of the survey.

1. It is necessary, if additional interviewers are used, that they be well oriented and completely familiar with the questionnaire and the survey procedure. Consideration should be given to the preparation of a manual or written set of instructions for use by interviewers.
2. Several managers expressed a desire for more time to study the various job roles and training responsibilities. In order to provide opportunity for more thoughtful consideration and hence, more valid information from this section of

the survey, it is recommended that this part of the questionnaire be mailed in advance to the person in charge of food service with an explanatory cover letter. The interviewer then would see that it was properly completed when she visited the food service facility to conduct the interview and complete the remaining part of the questionnaire.

3. If additional work is done with hospital food services, it is recommended that consideration be given to a different division based on hospital size. The middle category, 250 to 349 beds, was limited as to numbers of hospitals. Those in the small category, 25 to 249 beds, presented wide variations in organization and staffing patterns. The inclusion of more of these hospitals in the middle category would provide better balanced areas for study.
4. As indicated in the Results and Discussion, food service managers who have had professional training are better equipped to evaluate their training needs and to make recommendations than those with limited educational background and experience. This should be recognized as a possible problem depending upon the food service are being studied.

LIST OF REFERENCES

LIST OF REFERENCES

- Anon. 1963. Training for food service workers under the Manpower Development and Training Act. Hospitals 37 (20), 102.
- Anon. 1964. Food service management in hospitals, an A.D.A. survey. Journal of the American Dietetic Association 44, 255.
- Anon. 1965. The food service supervisor, an A.D.A. report. Journal of the American Dietetic Association 46, 183.
- Anon. 1968. Annual reports and proceedings, 51st annual meeting, San Francisco, California, 1967-1968, The American Dietetic Association, Chicago, Illinois.
- Anon. 1969. Job Corps: training for food service. Hospital and Nursing Home Management 5 (2), 39.
- Augspurger, J. A. 1965. Vocational opportunities for food service personnel. Journal of the American Dietetic Association 47, 44.
- Baden, E. M. 1967. An in-service training program for dietary employees. Journal of the American Dietetic Association 50, 216.
- Bennett, A. C. 1968a. Are our manpower problems completely insoluble? Hospital Topics 46 (9), 26.
- Bennett, A. C. 1968b. Needed approaches to manpower problems. Hospital Topics 46 (10), 48.
- Berke, M. 1960. Recruitment and training of personnel. Hospital Management 90 (1), 44.
- Fisher, B. 1967. Dynamic training program aims at reducing turnover. Hospitals 41 (22), 89.
- Freshwater, J. F., Bouma, J. C. and Lammimam, R. M. 1969. Labor utilization and operating practices in commercial cafeterias. Marketing Research Report No. 824, Agricultural Research Service, U.S. Department of Agriculture, U.S. Government Printing Office, Washington, D.C.
- Gehring, M. E. 1964. Motivating dietary employees through in-service education. Hospitals 38 (13), 69.
- Gray, E. M. and Donaldson, B. 1965. Costs and rate of labor turnover in a hospital dietary department. Journal of the American Dietetic Association 46, 369.

- Hartman, J. 1961. These signs lead supervisors to a sound training program. Modern Hospital 96 (3), 150.
- Hartman, J. 1964. College programs upgrade food personnel. Modern Hospital 102 (5), 146.
- Hartman, J. 1965. Maryland trains employees to keep them. Modern Hospital 105 (3), 156.
- Harwood, V. E. 1965. Indoctrination, orientation and training programs in relation to labor turnover in selected hospital dietary departments. M.S. Thesis, University of Maryland, College Park, Md.
- Hubbard, R. and Donaldson, B. 1968. Estimating professional manpower needs for hospital dietary departments. Journal of the American Dietetic Association 53, 211.
- Jernigan, A. K. 1961. Dietary progress in the smaller hospital. Hospitals 35 (21), 74.
- Jolin, J. P. and McKinley, M. M. 1968. Survey of labor and employment in Iowa hospitals. Hospitals 42 (17), 87.
- Kissick, W. L. 1967. How imagination and innovation can help bridge manpower gaps. Hospitals 41 (19), 76.
- Kleiva, A. 1967. Abstract of study on labor turnover in hospital dietary departments. In Proceedings of the Society for the Advancement of Food Service Research, October 9 and 10, 1967, p. 78.
- Lattin, G. W. 1969. Manpower projections for the food service industry. The Cornell Hotel and Restaurant Administration Quarterly 10 (1), 49.
- Lundberg, D. E. and Armatas, J. P. 1964. "The Management of People in Hotels, Restaurants and Clubs," William C. Brown Company, Dubuque, Iowa.
- Mallory, B. 1966. Programs for training food service employees. Journal of the American Dietetic Association 48, 390.
- McGehee, W. and Thayer, P. W. 1961. "Training in Business and Industry," John Wiley and Sons, Inc., New York, N. Y.
- Meek, H. B. 1967. Council on Hotel, Restaurant, and Institutional Education aids industry in education programs. The Cornell Hotel and Restaurant Administration Quarterly 8 (1), 36.

- Moore, A. N. 1964. Teaching machines: a new training aid for the dietitian. Hospitals 38 (13), 64.
- Moss, A. L. 1969. Manpower shortage in food service. The Cornell Hotel and Restaurant Administration Quarterly 10 (1), 43.
- Newport, M. G. 1968. A review of training fundamentals. Training and Development Journal 22 (10), 17.
- Pelto, J. M. and Sweatt, G. E. 1965. Personnel turnover in departments of dietetics. Journal of the American Dietetic Association 46, 369.
- Rockwell, J. A. and Vadakin, C. E. 1960. Turnover, a problem in employee relations. Hospital Management 89 (1), 44.
- Ross, A., Jr. 1967. An administrator looks at the department of dietetics. Journal of the American Dietetic Association 50, 26.
- Spears, M. C. 1961. Consultant or shared dietitian? Journal of the American Dietetic Association 38, 357.
- Stanfield, P. S. 1959. Reward of good training is good workers. Modern Hospital 92 (6), 138.
- State Hospital Licensing Board, 1968. Directory of hospitals licensed in Tennessee. State Hospital Licensing Board, Cordell Hull Building, Nashville, Tennessee.
- Stokes, J. W. 1967. "How to Manage a Restaurant or Institutional Food Service." William C. Brown Company, Dubuque, Iowa.
- Strauss, G. and Sayles, L. R. 1967. "Personnel: The Human Problems of Management." 2nd Ed., Prentice-Hall Inc., Englewood Cliffs, New Jersey.
- Styer, J., Bunton, M., Tilletson, J., and O'Malley, E. 1963. Training for food supervisors in metropolitan hospitals. Hospitals 37 (20), 96.
- U.S. Department of Health, Education and Welfare, 1965. MDTA, a summary of the Manpower Development and Training Act of 1962 as amended. U.S. Department of Labor, Manpower Administration, in cooperation with the U.S. Department of Health, Education and Welfare, Washington, D.C.
- U.S. Department of Health, Education and Welfare, 1967a. Conditions of participation; hospitals. Federal Health Insurance for the Aged. Code of Federal Regulation, Title 20, Chapter III, Part 405. U.S. Department of Health, Education and Welfare, Social Security Administration, Washington, D.C.

U.S. Department of Health, Education and Welfare, 1967b. Education for the allied health professions and services. U.S. Department of Health, Education and Welfare. Public Health Service Publication No. 1600, U.S. Government Printing Office, Washington, D.C.

U.S. Department of Health, Education and Welfare, 1968a. "Health Manpower, United States 1965 - 1967." Public Health Service Publication No. 1000 - Series 14 - No. 1. U.S. Department of Health, Education and Welfare, Public Health Service, Health Services and Mental Health Administration, Washington, D.C., U.S. Government Printing Office, Washington, D.C.

U.S. Department of Health, Education and Welfare, 1968b. "Health Resources Statistics." Public Health Service Publication No. 1509, 1968 Ed., U.S. Department of Health, Education and Welfare, Public Health Service, Health Services and Mental Health Administration, National Center for Health Statistics, Washington, D.C., U.S. Government Printing Office, Washington, D.C.

Wallace, D. E. 1959. Six steps for improving employee selection. Hospitals 33 (19), 86.

Weimer, E. W. 1966. Training programs will help fill the manpower gap. Hospitals 40 (11), 83.

Welch, J. 1966. "A Task-Unit Concept for On-The-Job Training in Food Service," Manual 66, University of Missouri Extension Service, Columbus, Mo.

Wolcyn, B. A., Keating, A. J., Stief, R. E., Harrison, W. C. and Knudsen, H. L. 1962. What in-service training can do. Modern Hospital 99 (6), 118.

Zahasky, M. C. 1968. President's report to members, The American Dietetic Association, 1967-68. Journal of the American Dietetic Association 53, 557.

APPENDIXES

APPENDIX A

REFERENCE SHEET FOR FOOD SERVICE MANAGER

DEFINITION OF EMPLOYEE CATEGORIES:

Manager - one who assumes the responsibility for planning, organizing and directing food service department resources to achieve the most efficient departmental operation.

Supervisor - one who is responsible for carrying out the policies and directions of management through the use of independent judgement in directing the activities of subordinate personnel.

Clerk - one who receives and processes data necessary for food service department operation.

Food Preparation Worker - one who performs the functions necessary to change the raw food product to that ready for distribution or service.

Food Service Worker - one who serves food to patients or customers in a specified manner; may perform other miscellaneous duties related to serving food.

Food Sanitation Worker - one who performs unskilled tasks such as mopping, cleaning floors, dish washing, pot and pan washing and other related duties.

If an employee performs tasks which are included in more than one category, he will be included in the category in which the greater part (60%) of his duties fall.

Any planned process of instruction which is designed to bring the employee's job knowledge, skill and proficiency up to a desired level will be considered training.

APPENDIX B

THE UNIVERSITY OF TENNESSEE
Knoxville 37916
COLLEGE OF HOME ECONOMICS

Department of
Food Science and
Institution Management

July 16, 1969

In order to identify present training needs for food service personnel in hospital dietary departments in Tennessee, we are initiating a pilot study of selected hospitals to be used as a basis for a more detailed survey later on.

The purpose of this study is to provide basic factual information needed for the development of meaningful educational programs for the food service industry throughout the state.

Realizing that everyone in administration is more than busy, we would be most appreciative of your cooperation in filling out the enclosed short questionnaire. Please return the questionnaire by July 22, 1969, in the enclosed envelope.

Sincerely,

Mary Jo Hitchcock
Associate Professor

Enclosures

DEPARTMENT OF FOOD SCIENCE AND INSTITUTION ADMINISTRATION

THE UNIVERSITY OF TENNESSEE, KNOXVILLE

SURVEY OF HOSPITAL FOOD SERVICE DEPARTMENTS

Please check and/or answer each item in the space indicated:

1. Hospital Name _____
2. Address _____
3. Number of beds _____
4. Is your food service department operated by:
(a) the hospital _____ (b) contract food service _____
5. What groups other than patients are served meals by the food service department:
(a) personnel _____ (b) visitors _____ (c) none _____
6. If you serve groups other than patients do you operate a:
(a) cafeteria _____ (b) coffee shop _____ (c) snack shop _____
(d) dining room with table service _____ (e) soda fountain _____
(f) other (specify) _____
7. Are you planning an expansion program within the next five years:
(a) yes _____ (b) no _____
8. If yes, how many additional beds _____

7/7/69

APPENDIX C

DEPARTMENT OF FOOD SCIENCE AND INSTITUTION MANAGEMENT

UNIVERSITY OF TENNESSEE

SURVEY OF HOSPITAL FOOD SERVICE DEPARTMENTS

QUESTIONNAIRE II TO SELECTED HOSPITALS

FOR USE BY INTERVIEWER IN TALKING WITH HOSPITAL ADMINISTRATOR AND
FOOD SERVICE MANAGER

Please attach Questionnaire I from each hospital interviewed.

ASK HOSPITAL ADMINISTRATOR:

9. As a hospital administrator, what do you consider your major problems relating to personnel in the food service area:
- (a) _____ (c) _____
(b) _____ (d) _____
10. What are the qualifications you look for when you hire a food service manager:
- (a) _____ (c) _____
(b) _____ (d) _____

ASK FOOD SERVICE MANAGER:

11. What is the total number of food service employees _____
12. How many of these are: (a) full time _____ (b) part time _____
13. How many are: (a) Managerial _____ (b) Supervisory _____
(c) Clerical _____ (d) Food Preparation Workers _____
(e) Food Service Workers _____ (f) Food Sanitation Workers _____
14. How many years of school have you completed (Dietary Internship will be considered one year) _____
15. If answer is above 12, indicate type of education: (a) adult education _____ (b) 2 Yr. Junior College _____ (c) 4 Yr. College _____
(d) Dietary Internship _____ (e) Other (specify) _____

16. Did you have training in the food service field: (a) yes _____
(b) no _____
17. Do you attend continuing education programs designed for food service managers: (a) yes _____ (b) no _____
18. Which of the following have you attended: (a) hospital sponsored management development program _____ (b) adult education evening courses _____ (c) college or university evening courses _____ (d) food service workshop _____ (e) food service professional organization or trade convention _____ (f) Other (specify) _____
19. Which of these do you feel would be most helpful in your particular job _____
20. We would like your opinion regarding the list of skills and knowledge necessary for various jobs. First, the managerial category: as you look over the list of skills and knowledge listed, do you feel additional ones should be added?
21. If yes, please write in those you feel should be added at the bottom of the list.
22. On the left side of the list, in the blank space, please indicate by an H the areas in which you feel training should be a hospital responsibility, by an O the areas in which you feel training should be provided by some other agency, and an S for those areas in which you feel training should be a shared responsibility.
23. On the right side of the list, in the blank space, please indicate by a check mark the areas in which managerial personnel are now given training by the hospital.

INTERVIEWER WILL PROVIDE MANAGER WITH A PEN AND ASK:

24. Would you please hi-light those areas you feel are most important for a manager to know?

INTERVIEWER WILL REPEAT INSTRUCTIONS FOR QUESTIONS 20 THROUGH 24 FOR EACH OF THE PERSONNEL CATEGORIES, THEN PROCEED TO QUESTION 25.

25. How many unfilled positions do you have at present in each of these job categories (a) Managerial _____ (b) Supervisory _____ (c) Clerical _____ (d) Food Preparation Workers _____ (e) Food Service Workers _____ (f) Food Sanitation Workers _____

26. In which category do you have the greatest employee turnover
(a) Managerial _____ (b) Supervisory _____ (c) Clerical _____
_____ (d) Food Preparation Workers _____ (e) Food Service
Workers _____
27. In which category are jobs most difficult to fill (a) Managerial
_____ (b) Supervisory _____ (c) Clerical _____ (d) Food
Preparation Workers _____ (e) Food Service Workers _____
(f) Food Sanitation Workers _____
28. Do you anticipate adding any positions to your department within
the next 5 years (a) yes _____ (b) no _____
29. If yes, for what reason? _____
30. If yes, in which categories (a) Managerial _____ (b) Supervisory
_____ (c) Clerical _____ (d) Food Preparation Workers _____
(e) Food Service Workers _____ (f) Food Sanitation Workers _____
31. Approximately what percentage of your employees have had some
formal training before being hired _____
32. Who is primarily responsible for training food service employees
in the hospital (a) Manager _____ (b) Staff Dietitian _____
(c) Supervisor _____ (d) Another Employee _____ (e) Other
(specify) _____

EMPLOYEE CATEGORY	GENERAL TASKS	SPECIFIC TASKS	SKILLS AND KNOWLEDGE
Food Sanitation Workers:	Maintains sanitary standards of utensils and equipment used in food preparation and service.	Washes and sanitizes dishes, pots and pans	Mark <u>H</u> , <u>O</u> , or <u>S</u> Check (✓) if Hospital Trains
Dishwashers, pot and pan washers		Cleans heavy stationary equipment and walk-in refrigerators	Human Relations
Porters	Maintains sanitary standards of physical plant.	Sweeps and mops floors Removes trash and garbage	Communications Sanitation and Personal Hygiene Safety
		May wash walls and windows	Use and Care of Equipment
		May assist in moving supplies	Work Simplification
		May assist in simple food preparation such as breaking eggs, opening cans and packaged items, and preparing produce	

EMPLOYEE CATEGORY	GENERAL TASKS	SPECIFIC TASKS	SKILLS AND KNOWLEDGE
Food Service Workers:	Serves food to customer or patient in specified manner	Portions food into dishes	Mark <u>H</u> , <u>O</u> , or <u>S</u> Check (✓) if Hospital Trains
		Serves food for patient trays or on cafeteria line	Human Relations
Waitresses Dietary Aides Cafeteria Aides or Counter Attendants and Related Positions		Takes orders and serves food at tables	Communications
		Sets up steam table or cafeteria counter for service	Sanitation and Personal Hygiene
		Changes linens and sets tables	Safety
		May assemble food onto patient tray and serve tray to patient	Food Display and Service
		May visit patients to collect menus	Quality Standards for Food
		May clear tables and return dishes to kitchen	Use and Care of Equipment
		May collect patient trays for return to kitchen	Menu Terminology
		May work at soda fountain	Limited Knowl- edge of Food Preparation
		May clean silver and make coffee	Work Simplification
		May perform other miscellaneous tasks related to serving food	

EMPLOYEE CATEGORY	GENERAL TASKS	SPECIFIC TASKS	SKILL AND KNOWLEDGE
Food Preparation Workers:	Performs operations necessary to convert raw food to product ready for distribution and service	Chief cook directs and supervises performance of staff cooks and helpers	Mark <u>H</u> , <u>O</u> , or <u>S</u> Check (✓) if Hospital Trains
Cooks, Bakers, Salad Preparation Workers and Helpers		Follows production schedule by performing preliminary processes of preparing food to be cooked such as washing, dicing, peeling, slicing, etc., weighing or measuring ¹ food if necessary	Human Relations _____ Communications _____ Sanitation and Personal Hygiene _____ Menu Terminology _____ Principles of Nutrition, as Related to Food Preparation _____ Use of Standardized Recipes _____ Principles of Quantity Food Preparation and Service and Ability to Apply Them _____ Food Preparation for Special Diets _____ Quality Standards for Food _____
		Combines food items according to prescribed recipe.	
		Cooks food by appropriate method following specified procedure ¹	
		Prepares food for service by slicing, portioning, panning, garnishing, etc. ¹	
		Evaluates product	

¹U.S. Dept. of Health, Education and Welfare, 1961. "Food Service Industry, Training Programs and Facilities." Vocational Div. Bull. 298, p. 12. U.S. Government Printing Office, Washington, D.C.

EMPLOYEE CATEGORY	GENERAL TASKS	SPECIFIC TASKS	SKILL AND KNOWLEDGE	Check (✓) if Hospital Trains
Food Preparation Workers: (continued)			Mark <u>H</u> , <u>C</u> , or <u>S</u>	
			Proper Food Handling and Storage	_____
			Use and Care of Equipment	_____
			Safety	_____
			Basic Mathematics	_____
			Work Simplification	_____
			Chief Cook must have knowledge of supervisory techniques	_____

EMPLOYEE CATEGORY	GENERAL TASKS	SPECIFIC TASKS	SKILLS AND KNOWLEDGE
Clerical:	Receives, compiles and stores records of information and data necessary for operation of department ¹	Performs general office routines, typing, filing, book-keeping, answering phone, and other related duties	Mark <u>H</u> , <u>O</u> , or <u>S</u> Check (✓) if Hospital Trains
Office personnel		Keeps records as designated by manager such as meals served, operational costs, purchases and personnel records	Human Relations Communications
Diet Clerks		Processes such standard operating forms as purchase orders, invoices, periodic reports and personnel information	Basic Mathematics
Cashiers		Prepares dietary information for use by kitchen personnel in food preparation. May keep records of diet and room number changes for accurate tray delivery at mealtime. May check tray served against menu for accuracy. ²	Menu and Diet Technology
Storeroom Clerks			Depending upon clerical assignment: Operation of office machines Bookkeeping Operation of Cash Register Food Item Terminology, Packaging Unit, and Proper Storage

¹Donaldson, B. and Ostenso, G. 1967. "Productivity of Dietary Personnel: Work Sampling Methodology Method Manual." P. 35. Dept. of Food and Nutrition, University of Wisconsin.

²U.S. Dept. of Labor, 1965. "Dictionary of Occupational Titles." Vol. I, 3rd Ed. p. 202, U.S. Government Printing Office, Washington, D.C.

EMPLOYEE CATEGORY	GENERAL TASKS	SPECIFIC TASKS	SKILLS AND KNOWLEDGE
Clerical: (continued)		Receives money from customers and records sales and cash receipts. Receives and issues food and supplies. Maintains food and supply inventory.	Mark <u>H</u>, <u>O</u>, or <u>S</u> Check (✓) if Hospital Trains
		General principles of Food Inventory Control, Food Issue, and Stock Room Operation	General principles of Food Inventory Control, Food Issue, and Stock Room Operation
		Sanitary Standards as Related to Food Storage	Sanitary Standards as Related to Food Storage
		Criteria used in evaluation of food as purchased	Criteria used in evaluation of food as purchased

EMPLOYEE CATEGORY	GENERAL TASKS	SPECIFIC TASKS	Mark <u>H</u> , <u>O</u> , or <u>S</u>	SKILLS AND KNOWLEDGE	Check (✓) if Hospital Trains
Supervisory: Food service supervisors for both food preparation and service	Uses independent judgment to direct activities of subordinate per- sonnel in such a way that plans, policies, and directions of management are carried out.	Supervises employees in food service department in food production and ser- vice, and in main- taining cleanliness of department and equipment. "Instructs workers in methods of per- forming duties and assigns and coordi- nates work of employees to promote efficiency of operations." ¹ Keeps records as directed by manage- ment such as meals served, food cost, usage level of food and supplies. May supervise service of trays to hospital patients and assist in planning special diets.	_____	Menu Terminology _____	_____
			_____	Principles of Nutrition and Diet Therapy _____	_____
			_____	Use and Care of Equipment _____	_____
			_____	Human Relations _____	_____
			_____	Communications _____	_____
			_____	Sanitary and Safety Standards _____	_____
			_____	Mathematics as Related to Cost Control _____	_____
			_____	Principles and Standards of Quantity Food Service and Preparation _____	_____
			_____	Effective Use of Non-Super- visory Per- sonnel _____	_____

¹U.S. Dept. of Labor, 1965. "Dictionary of Occupational Titles." Vol. I, 3rd Ed.,
p. 294. U.S. Government Printing Office, Washington, D.C.

EMPLOYEE CATEGORY	GENERAL TASKS	SPECIFIC TASKS	SKILLS AND KNOWLEDGE
Supervisory: (continued)		May assist management in purchasing and procurement of food and supplies, cost accounting, evaluating and training employees, and planning for change.	

EMPLOYEE CATEGORY	GENERAL TASKS	SPECIFIC TASKS	Mark <u>H</u> , <u>O</u> , or <u>S</u>	SKILLS AND KNOWLEDGE	Check (✓) if Hospital Trains
Managerial: Dietitians, Food Service Managers	Plans, organizes, directs, coordinates and controls human, physical and financial resources of food service department in order to achieve department and organization goals. If part of a larger system, interprets departmental goals, objectives, and needs to systems director.	Plans and directs operation of food service department. Procures or consults in procuring food, supplies, and equipment. Maintains adequate record keeping and cost control measures. Studies and analyzes records and procedures to improve utilization of departmental resources. Plans menu according to nutrition principles, directs food preparation and service. Maintains appropriate sanitary and safety standards. Selects, trains, supervises, and evaluates personnel according to job performance standards. May instruct groups or individuals in nutrition or diet selection.		Management Principles	_____
				Food Procurement	_____
				Record Keeping (financial, personnel, etc.)	_____
				Human Relations	_____
				Communications	_____
				Layout and Design of Equipment and Plant	_____
				Human Nutrition and Food Science	_____
				Quantity Food Preparation and Service	_____
				Menu Planning	_____
				Personnel Administration	_____
				Use and Care of Equipment	_____

EMPLOYEE CATEGORY	GENERAL TASKS	SPECIFIC TASKS	SKILL AND KNOWLEDGE	
Managerial: (continued)		May write for technical journals or prepare educational material on food and proper nutrition.	Mark <u>H</u> , <u>O</u> , or <u>S</u>	Check (✓) if Hospital Trains
			_____	May need information regarding specific types of feeding requirements such as hospitals, students, aged, etc.

APPENDIX D

TABLE 8
MAJOR PROBLEMS RELATING TO FOOD SERVICE PERSONNEL AS REPORTED
BY HOSPITAL ADMINISTRATORS

Problem	350 Beds or over ^a	250 - 349 Beds ^b	25 - 249 Beds ^c
	Percent	Percent	Percent
Relating to personnel shortage	30	33	25
Relating to training	50	33	75
Turnover	40	67	17
Lack of leadership	10	--	--
Lack of proper supervision	10	--	8
Lack of management ability in first line supervision	10	--	--
Continuity of supervision and management	--	33	--
Need for positions on a professional basis	--	33	--

^a_n = 10 hospitals

^b_n = 3 hospitals

^c_n = 12 hospitals

TABLE 9
QUALIFICATIONS OF FOOD SERVICE MANAGERS DESIRED BY
HOSPITAL ADMINISTRATORS

Qualification	350 Beds or over ^a Percent	250 - 349 Beds ^b Percent	25 - 249 Beds ^c Percent
American Dietetic Association membership	50	67	75
Knowledge of human relations	50	33	33
Technical knowledge in dietary field	60	33	50
Experience in dietetics and in management	30	33	25
Administrative or managerial skills	20	67	25
Ability to direct people	20	--	--
Creativity	10	--	--
Industrial engineering and industrial management techniques	10	--	--
Good personality	--	--	8
Ability to contact patients	--	--	8
Motivation (desire to accomplish)	--	--	8
Good character	--	--	8

^a_n = 10 hospitals

^b_n = 3 hospitals

^c_n = 12 hospitals

TABLE 10
EMPLOYEE DISTRIBUTION, TURNOVER AND REPLACEMENT DIFFICULTY IN SIX JOB CATEGORIES

Job category	Employee Distribution ^a			Greatest Employee Turnover ^b			Jobs Most Difficult to Fill ^b		
	L	M	S	L	M	S	L	M	S
Managerial	6	5	8	--	--	--	10	33	17
Supervisory	9	5	6	--	--	--	30	--	--
Clerical	6	11	5	--	--	--	--	--	--
Food preparation workers	17	18	40	10	33	42	10	--	42
Food service workers	42	40	23	30	67	8	20	33	8
Food sanitation workers	19	21	17	80	67	8	40	67	8

L = Large hospitals 350 beds or over

M = Medium hospitals 250 - 349 beds

S = Small hospitals 25 - 249 beds

^aPercentage based on a total of 1181 employees for large hospitals, 149 for medium and 193 for small hospitals.

^bPercentage based on opinion of managers in a total of 10 large, 3 medium and 12 small hospitals.

TABLE 11

REACTION TO TRAINING FOR MANAGERIAL PERSONNEL BY LARGE, MEDIUM
AND SMALL HOSPITALS

Skill or Knowledge	Most Important ^a			Conducting Trainings ^a			Hospital Resp. ^a			Outside Agency Resp. ^a			Shared Resp. ^a		
	L	M	S	L	M	S	L	M	S	L	M	S	L	M	S
Human relations	90	100	92	60	67	25	10	--	25	30	--	33	60	100	42
Communications	90	100	83	50	67	33	20	--	25	20	33	33	60	67	42
Management principles	80	100	92	60	33	33	--	--	17	60	100	33	40	--	50
Record keeping	40	67	42	50	--	33	10	--	50	50	67	33	40	33	17
Food procurement	40	67	67	40	--	33	--	--	58	50	67	25	50	33	17
Layout and design of equipment and plant	30	67	50	40	--	17	--	--	8	40	67	42	60	33	50
Human nutrition and food science	60	100	100	30	--	8	10	--	--	70	100	67	20	--	33
Quantity food preparation and service	40	67	58	40	--	17	20	--	25	50	100	50	30	--	25
Menu planning	40	100	92	30	--	8	20	--	25	50	100	33	30	--	42
Personnel administration	80	67	75	60	--	17	20	--	42	30	67	33	50	33	25
Use and care of equipment	30	67	58	50	33	33	10	--	8	30	33	25	60	67	67
Specific information regarding types of feeding requirements for certain groups	10	67	25	40	33	8	10	--	8	30	67	25	60	33	67

L = Large hospitals 350 beds or over

M = Medium hospitals 250 - 349 beds

S = Small hospitals 25 - 249 beds

a percentage based on 10 large, 3 medium and 12 small hospitals.

TABLE 12
REACTION TO TRAINING FOR SUPERVISORY PERSONNEL BY LARGE, MEDIUM
AND SMALL HOSPITALS

Skill or Knowledge	Most Important ^a			Conducting Training ^a			Hospital Resp. ^a			Outside Agency Resp. ^a			Shared Resp. ^a		
	L	M	S	L	M	S	L	M	S	L	M	S	L	M	S
Human relations	80	100	92	50	100	50	10	--	42	10	--	8	80	100	50
Communications	90	100	75	50	100	50	20	33	42	10	33	8	70	33	50
Use and care of equipment	70	67	92	80	100	67	40	33	33	10	33	8	50	33	58
Menu terminology	40	67	83	60	33	58	30	33	58	20	33	25	50	33	17
Principles of nutrition and diet therapy	50	100	83	70	67	58	20	--	25	30	67	42	50	33	33
Sanitary and safety standards	70	67	83	80	100	67	20	33	17	10	33	33	70	33	50
Mathematics as related to cost control ^b	20	67	27	30	33	55	30	33	36	40	67	36	30	--	27
Principles and standards of quantity food preparation and service	70	67	100	60	67	67	20	--	42	20	67	8	60	33	50
Effective use of non-supervisory personnel ^b	70	67	64	80	67	45	--	33	45	20	33	--	80	33	55

L = Large hospitals 350 beds or over

M = Medium hospitals 250 - 349 beds

S = Small hospitals 25 - 249 beds

^apercentage based on 10 large, 3 medium and 12 small hospitals.

^bpercentage based on 10 large, 3 medium and 11 small hospitals.

TABLE 13

REACTION TO TRAINING FOR CLERICAL PERSONNEL BY LARGE, MEDIUM
AND SMALL HOSPITALS

Skill or Knowledge	Most Important ^a			Conducting Training ^a			Hospital Resp. ^a			Outside Agency Resp. ^a			Shared Resp. ^a		
	L M S			L M S			L M S			L M S			L M S		
	L	M	S	L	M	S	L	M	S	L	M	S	L	M	S
Human relations	50	67	92	40	67	50	20	--	42	20	--	8	60	100	50
Communications	90	100	67	50	67	50	30	--	42	10	33	8	60	67	50
Basic mathematics	60	67	67	--	--	--	10	--	8	90	100	67	--	--	25
Menu and diet terminology	40	33	83	60	33	33	60	--	42	--	67	16	40	33	42
Operation of office machines	10	100	42	20	--	9	10	--	--	50	100	82	40	--	18
Bookkeeping	40	100	42	20	--	18	--	--	18	60	67	73	40	33	9
Operation of cash register ^b	10	33	55	40	67	--	40	33	9	50	33	73	10	33	18
Food item terminology, packaging unit and proper storage ^b	20	67	64	60	67	36	60	33	45	--	33	18	40	33	36
General principles of food inventory control, food issue, and stock room operation ^b	70	100	55	70	100	45	40	33	18	10	33	9	50	33	73
Sanitary standards as related to food storage ^c	30	67	64	60	100	45	20	--	40	30	33	20	50	67	40
Criteria used in evaluation of food as purchased ^b	30	67	36	50	33	36	30	33	18	--	33	18	70	33	64

L = Large hospitals 350 beds or over

M = Medium hospitals 25 - 249 beds

S = Small hospitals 25 - 249 beds

^aPercentage based on 10 large, 3 medium, and 12 small hospitals.

^bPercentage based on 10 large, 3 medium and 11 small hospitals.

^cPercentage based on 10 large, 3 medium and 10 small hospitals.

TABLE 14

REACTION TO TRAINING FOR FOOD PREPARATION WORKERS BY LARGE, MEDIUM
AND SMALL HOSPITALS

Skill or Knowledge	Most Important ^a			Conducting Training ^a			Hospital Resp. ^a			Outside Agency Resp. ^a			Shared Resp. ^a		
	L	M	S	L	M	S	L	M	S	L	M	S	L	M	S
Human relations	50	33	67	40	67	75	30	--	42	30	--	8	40	100	50
Communications	80	67	58	50	67	83	30	--	42	20	--	8	50	100	50
Sanitation and personal hygiene	80	100	100	90	100	100	40	33	25	20	33	8	40	33	67
Menu terminology	50	67	92	70	67	92	40	33	67	10	33	--	50	33	33
Principles of nutrition as related to food preparation	20	67	92	70	67	83	30	33	33	20	67	8	50	--	58
Use of standardized recipes	60	67	100	60	100	83	30	67	50	40	33	8	30	--	42
Principles of quantity food preparation and service and their application	70	100	75	70	67	67	20	--	25	30	67	8	50	33	67
Food preparation for special diets	60	67	100	90	67	92	50	67	58	20	33	--	30	--	42
Quality standards for food	60	67	83	70	100	75	30	33	25	20	67	8	50	--	67
Proper food handling and storage	50	67	83	70	100	92	10	33	17	40	67	17	50	--	66
Use and care of equipment	70	100	67	90	100	92	30	33	25	10	67	17	60	--	58
Safety	60	33	75	80	100	67	30	33	17	--	--	17	70	67	66
Basic mathematics	40	33	50	20	--	33	20	33	8	80	67	25	--	--	67
Work simplification	30	33	67	60	67	67	40	33	50	30	67	17	30	--	33
Chief cook must have knowl- edge of supervisory techniques	50	33	42	50	--	42	10	--	25	40	33	17	50	67	58

L = Large hospitals 350 beds or over; M = Medium hospitals 250 - 249 beds;
S = Small hospitals 25 - 249 beds.
apercentage based on 10 large, 3 medium and 12 small hospitals.

TABLE 15
REACTION TO TRAINING FOR FOOD SERVICE WORKERS BY LARGE, MEDIUM
AND SMALL HOSPITALS

Skill or Knowledge	Most Important ^a			Conducting Training ^a			Hospital Resp. ^a			Outside Agency Resp. ^a			Shared Resp. ^a		
	L	M	S	L	M	S	L	M	S	L	M	S	L	M	S
Human relations	70	67	83	40	67	58	30	--	42	20	--	8	50	100	50
Communications	80	67	67	30	67	58	30	33	42	10	--	8	60	67	50
Sanitation and personal hygiene	90	100	100	90	100	83	40	33	25	30	33	8	30	33	67
Safety	40	67	83	100	100	75	30	33	42	20	--	8	50	67	50
Food display and service	40	100	100	80	100	75	50	--	42	20	33	8	30	67	50
Quality standards for food	50	33	75	70	33	50	30	33	17	30	33	8	40	33	75
Use and care of equipment	30	100	75	90	100	75	40	33	50	10	33	8	50	33	42
Menu terminology	50	100	75	80	67	58	60	67	58	10	33	8	30	--	33
Limited knowledge of food preparation	20	67	67	50	67	58	40	33	58	30	67	--	30	--	42
Work simplification	30	33	67	50	67	50	50	33	58	20	67	8	30	--	33

L = Large hospitals 350 beds or over

M = Medium hospitals 250 - 349 beds

S = Small hospitals 25 - 249 beds

apercentage based on 10 large, 3 medium and 12 small hospitals.

TABLE 16
REACTION TO TRAINING FOR FOOD SANITATION WORKERS BY LARGE, MEDIUM
AND SMALL HOSPITALS

Skill or Knowledge	Most Important ^a			Conducting Training ^a			Hospital Resp. ^a			Outside Agency Resp. ^a			Shared Resp. ^a		
	L	M	S	L	M	S	L	M	S	L	M	S	L	M	S
Human relations	50	33	58	50	33	67	40	67	42	20	--	8	40	33	50
Communications	80	67	58	40	33	67	40	33	42	10	--	8	50	67	50
Sanitation and personal hygiene	90	100	100	90	100	92	30	33	42	40	33	17	30	33	41
Safety	70	67	92	100	100	92	30	33	33	20	--	17	50	67	50
Use and care of equipment	90	100	100	90	100	92	40	33	42	--	33	8	60	33	50
Work simplification	50	33	50	50	67	67	40	33	58	20	67	17	40	--	25

L = Large hospitals 350 beds or over

M = Medium hospitals 250 - 349 beds

S = Small hospitals 25 - 249 beds

^aPercentage based on 10 large, 3 medium and 12 small hospitals.

VITA

Moiselle Peay, a native of middle Tennessee, received the Bachelor of Science degree in Home Economics with a major in Foods and Nutrition from George Peabody College in Nashville, Tennessee, in June, 1948. In the summer of 1948, she began a Dietary Internship at Vanderbilt University Hospital in Nashville which was completed in June, 1949.

Since that time, she has held positions as therapeutic dietitian, Baptist Hospital, Nashville, Tennessee; staff dietitian, Veteran's Administration Hospital, Nashville; and chief dietitian, Baptist Hospital, Nashville.

In January, 1969, she entered the Graduate School at the University of Tennessee to work on a Master of Science degree in Institution Management. While at the University, she was a graduate assistant in the College of Home Economics, Department of Food Science and Institution Management.

She is presently employed as a Dietary Consultant with the Tennessee Department of Public Health, and will receive the Master of Science Degree in Institution Management in December, 1969.